

Kiktenko, V. A.

USSR/Engineering - Water power

Card 1/1 Pub. 123 - 7/11

Authors : Chokin, Sh. Ch., and Kiktenko, V. A.

Title : Proper method of feeding water from the Irtysh River into Central Kazakhstan for industrial and electrical power

Periodical : Vest. AN Kaz. SSR 12, 63-84, Dec 1955

Abstract : A rational method of supplying water from the Irtysh River into Central Kazakhstan for industrial and electrical power, is explained. Map showing the main channel and its branches is included. Eight USSR references (1937-1955). Tables; chart.

Institution : .....

Submitted : .....

*KIKTENKO, V.A.*  
GHOKIN, Sh.Ch.; KIKTENKO, V.A.; ZHULAYEV, A.Zh.

Basic indices and comparative evaluation of variants of the Irtysh-Central Kazakhstan Canal route. Vest. AN Kazakh. SSR 13 no.12:3-15  
D '57. (MIRA 11:1)

(Kazakhstan--Canals)

KIKTENKO, V.I.A.

USSR/Engineering - Irrigation

Card 1/1 Pub. 123 - 2/12

Authors : Chokin, Sh. Ch.; Kalachev, I. S.; and Kiktenko, V. A.

Title : Regarding the problem of irrigation of the central Kazakhstan with Irtysh river water

Periodical : Vest. AN Kas. SSR 6/123, 15-24, June 1955

Abstract : The fast development of industry and agriculture in the central Kazakhstan brought up the problem of a more intensive water supply for the Kazakhstan where the natural sources of water are inadequate. Two projects were worked out in solving the above mentioned problem. An outlined description of these projects is presented. The construction of dams utilizing the Irtysh river waters is suggested in both projects. Map; table.

Institution : .....

Submitted : .....

ZHULAYEV, A.Zh.; KIKTEGO, V.A.; CHOKIN, Sh.Ch.

Methods for calculating the route of water approach over a section  
of mountain passes on the run. Izv. AN Kazakh. SSR. Ser. eng. no. 2:  
51-51 '59. (NIRA 12:7)

(Hydraulics)

CHOKIN, Sh.Ch., akademik, red.; KIKTENKO, V.A., kand.tekhn.nauk, red.;  
ZAPLAVNOV, O.V., red.; PROKHOROV, V.P., tekhn.red.

[The problem of water supply in central Kazakhstan] Problema vodo-  
obespechenia Tsentral'nogo Kazakhstana; sbornik statei. Pod red.  
Sh.Ch. Chokina i V.A.Kiktenko. Alma-Ata, 1960. 364 p.  
(MIRA 13:10)

1. Akademiya nauk Kazakh'skoy SSR, Alma-Ata. 2. AN KazSSR (for  
Chokin). 3. Institut energetiki AN KazSSR (for Chokin, Kiktenko).  
(Kazakhstan--Water supply)

KIKTENKO, V.A.

Principal basis for the irrigation of central Kazakhstan by changing  
the flow of the Irtysh River. Trudy Inst. energ. AN Kazakh. SSR  
2:49-63 '60. (MIRA 15:1)

(Irtysh Valley--Irrigation)

SYABRYAY, V.T.; ROTMAN, R.N.; KIKTENKO, V.F.

New data on the coal potential of the Krivoy Rog brown coal region.  
Geol.zhur.22 no.1:87-91 '62. (MIRA 15:2)

1. Institut geologicheskikh nauk AN USSR.  
(Krivoy Rog Basin--Coal geology)

KIKTENKO, V.S., podpolkovnik meditsinskoy sluzhby, kandidat meditsinskikh  
NAUK

Epidemiology and prevention of leptospirosis. Voen.-med.zhur. no.6:  
64-69 Ja '51. (MLFA 9:9)  
(LEPTOSPIROSIS)

KIKTENKO, V.S.

[Leptospirosis in man] Leptosporozy cheloveka. Moskva, Medgiz,  
1954. 209 p. (MLRA 7:12)  
(Leptospirosis)

ROZHDESTVENSKIY, V.M.; KUCHERENKO, V.D.; KIKTENKO, V.S.; AGAFONOV, V.I.

Academician Daniil Kirillovich Zabolotnyi, outstanding scientist and humanitarian. Zhur. mikrobiol. epid. i immun. no.12:17-23 no.12:17-23 D '54. (MLRA 8:2)

(ZABOLOTYNI, DANIIL KIRILLOVICH, 1866-1929)

KIKTENKO, V. S.

"Concerning the Variability and Reproduction of Leptospirae," Zhur. Mikrobiol.,  
Epidemiol. i Immunobiol., No.1, pp 70-76, 1955

Translation M-1066, 13 Apr 56

KIKTENKO, V.S.

KIKTENKO, V.S.

Simplified reaction for the adsorption of agglutinins in studying leptospirosis. Zhur.mikrobiol.epid. i immun. no.8:50-52 Ag '55.  
(MLRA 8:11)

L. Iz Tsentral'nogo instituta usovershenstvovaniya vrachev  
(LEPTOSPIROSIS, diagnosis,  
serol,simplified reaction of adsorption of agglutinins)

*KIKTENKO*  
ANAN'IN, V.V.; KIKTENKO, V.S.

Comparative study of strains of pathogenic Leptospira isolated  
in the Soviet Union and in foreign countries. Zhur.mikrobiol.  
epid. i immun. no.9:92-97 S '55. (ULRA 8:11)

1. Iz instituta epidemiologii i mikrobiologii imeni N.F.Gamalei  
AMN SSSR (doc.prof. G.V.Vygodchikov) i kafedry epidemiologii  
Voyennogo fakul'teta Tsentral'nogo instituta usovershenstvovaniya  
vrachey.

(LEPTOSPIRA,

comparison of pathogenic strains isolated in Russia  
& foreign countries)

KIKTENKO, V.S., ASHUROVA, I.Kh., KUCHERENKO, V.D.

Simplified method for setting up the agglutinin adsorption test.  
Voen.-med.zhur. no.12:46-47 D'55 (MIRA 12:1)  
(AGGLUTINATION)

KIKTENKO, V. S.

EXCERPTA MEDICA Sec.4 Vol.11/4 Med.Microb. etc. April 58

820. COLLECTION OF AIR SAMPLES FOR BACTERIOLOGICAL ANALYSIS  
(Russian text) - Kiktenko V. S., Ashurova I. Kh., Kutcher-  
enko V. D. and Kashanova N. I. - VOYEN. MED. ZH. 1956, 11 (50-  
54) Tables 1 Illus. 3

The authors consider apparatuses constructed on the principle of filtration of the air through liquids or through dry filters as the most efficient for trapping bacteria, viruses, rickettsiae and toxins and suggest a new portable sampling apparatus. The apparatus has a U-shaped glass tube 25 cm. long and 1.5 cm. in diameter, connected by a rubber tube with a 250 ml. bottle having a long neck and placed upside down. Before collection of air samples, the tube and part of the bottle is filled with glass beads (230 g.) and with normal saline or broth. The air can be aspirated with a pump connected by a rubber tube to the neck of the bottle or it can be sucked in by the technician. Comparative studies showed this apparatus to be 2-3 times more efficient in catching microbes in the air than Diakonov's apparatus. The authors recommend this apparatus for collection of air samples in hospitals and under field conditions for bacteriological investigation.

Vavilin - Moscow (S)

KIRPENKO, V.S., KUCHERENKO, V.D.

Possibility of the propagation of pathogenic microorganisms in the external environment. Zhur.mikrobiol.epid. i immun. 29 no.5:133-136  
My '58 (MIRA 11:6)

(COMMUNICABLE DISEASES, transmission,  
through environmental microorganisms, review (Rus))

KIKTINKO, V.S.; ANAN'IN, V.V.; KASHANOVA, N.I.

Identity of *Leptospira DV-V* and *Leptospira pomona*. Zhur. mikrobiol.  
epid. i immun. 29 no.8:46-49 Ag '58. (MIRA 11:10)  
(LEPTOSPIRA,  
pomona, identification with DV-V strain (Rus))

KIKTENKO, V.S.; KASHANOVA, N.I.; KUDRYAVTSEV, S.I.; PUSHCHIN, N.I.

New apparatus for bacteriological analysis of the air in negative  
temperatures. Lab. delo 7 no.3:38-40 Mr '61, (MIRA 14:3)  
(AIR--BACTERIOLOGY)

S/194/62/000/006/035/232  
D295/D308

AUTHORS: <sup>✓</sup> Kiktenko, H.S., Safronov, Yu.P., Kudryavtsev, S.I.,  
Bl'man, R.I., Fedorov, B.F., Pushchin, M.I., and  
Fedorovich, A.A.

TITLE: Apparatus for the automatic counting of the particles  
of a bacterial aerosol.

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika,  
no. 6, 1962, abstract 6-2-65 p (Labor. delo, no. 10,  
1961, 57-60)

TEXT: A description is given of an apparatus for the automatic  
counting of the number of particles of a bacterial aerosol passing  
through the cuvette of the flow-type BSM(VDK) ultramicroscope. The  
apparatus consists of a photo-electronic unit, an amplifier and a  
pulse counter. The intensity of the light flux scattered by the  
particles is sufficient to be recorded by the  $\phi\phi\gamma$ -19 (FEU-19) and  
 $\phi\phi\gamma$ -25 (FEU-25) photo-multipliers. The duration of a light impul-  
se from a particle is 0.5 - 0.6 sec. and the pulse repetition fre-  
quency depends on concentration and does not usually exceed 300 -  
Card 1/2 ✓

Apparatus for the automatic counting ... S/194/62/000/006/035/232  
D295/D308

400 pulses/min. An electro-mechanical Cs-137 (Sb-1K) type counter with 6000 pulses/min. resolving power is used for recording. Error due to the inertness of the circuit can arise as a consequence of the occurrence of two or more particles in the field of vision of the instrument at  $< 0.1$  sec. interval. The error due to this cause is 1 %. The apparatus has been used for counting particles of a bacterial aerosol from a liquid culture of bacillus mirabilis. The results of automatic counting exceed by 25 % the results of visual counting. In investigating the number of dust particles of the outdoor air of a town,  $39.28 \times 10^6$  solid particles per 1 l of air were observed visually, while the automatic apparatus detected  $110 \times 10^6$  particles. 2 figures and 4 references. [Abstracter's note: Complete translation.] ✓

Card 2/2

KIKTENKO, V.S., doktor med.nauk, prof.; SAFRONOV, Yu.P., kand.tekhn.nauk;  
KUDRYAVTSEV, S.I.; EL'MAN, R.I.; FEDOROV, B.F.; PUSHCHIN, N.I.;  
FEDOROVICH, A.A.

Photoelectronic count of the number of aerosol particles of organic  
and inorganic origin. Gig. i san. 26 no.2:47-53 F '61.  
(MIRA 14:10)

(AEROSOLS)

KIKTENKO, V.S.; KASHANOVA, N.I.; KUDRYAVTSEV, S.I.; PUSHCHIN, N.I.

New method for examining bacterial diffusion in the air. Zhur.  
mikrobiol. epid. i immun. 32 no.7:6-12 Jo '61. (MIRA 15:5)  
(AIR--MICROBIOLOGY)

SKVORTSOV, Vitaliy Vasil'yevich, KIKTENKO, Vasiliy Sil'vestrovich;  
KUCHERENKO, Vasiliy Dorofiyevich; ROZHDESTVENSKIY, V.M.,  
red.; SENCHILO, K.K., tekhn. red.

[Viability and detection of pathogenic microbes in an external  
medium] Vyzhivaemost' i indikatsiia patogennykh mikrobov vo  
vneshnei srede. Moskva, Medgiz, 1960. 348 p. (MIRA 16:1)  
(BACTERIA, PATHOGENIC)

KIKTENKO, V.S.

Natural foci of leptospirosis. Zhur. mikrobiol., epid. i immun.  
33. no.12:49-54 D '62. (MIRA 16:5)

1. Iz kafedry epidemiologii Tsentral'nogo instituta usovershen-  
stvovaniya vrachey. (ZOOZOSES) (LEPROSPIROSIS)

ABELEV, G.I., kand. med. nauk; BUKRINSKAYA, A.G., kand. med. nauk;  
GEL'TSER, R.R., prof.; GOLINEVICH, Ye.M., prof.; ZHDANOV, V.M.,  
prof.; ZDRODOVSKIY, P.F., prof.; KALINA, G.P., prof.; KAULEN,  
D.R., kand. med. nauk; KIKTENKO, V.S., prof.; KRYLOVA, O.P.,  
kand. med. nauk; KUCHERENKO, V.D., kand. med. nauk; LOMAKIN,  
M.S., kand. med. nauk; MOSING, G.S., doktor med. nauk; PERSHINA,  
Z.G., kand. sel'khoz. nauk; PEKHOV, A.P., doktor biol. nauk;  
PESHKOV, M.A., prof.; TIKHONENKO, T.I., kand. med. nauk;  
TOVARNITSKIY, V.I., prof.; SHEN, R.M., prof.; ETINGOF, R.N.,  
kand. med. nauk; KALININA, G.P., prof., nauchnyy red. toma;  
ZHUKOV-VEREZHNIKOV, N.N., prof., otv. red.; VYGODCHIKOV, G.V.,  
prof., zamest. otv. red.; TIMAKOV, V.D., prof., zam. otv. red.  
BAROYAF, O.A., prof., red.; KALINA, G.P., red.; PETROVA, N.K.,  
tekhn. red.

[Multivolume manual on the microbiology, clinic, and epidemiology  
of infectious diseases]Mnogotomnoe rukovodstvo po mikrobiologii  
klinike i epidemiologii infektsionnykh boleznei. Moskva, Medgiz,  
Vol.2. [General microbiology]Obshchaya mikrobiologiya. Red. V.M.  
Zhdanov. 1962. 535 p. (MIRA 16:1)

(Continued on next card)

ANAN'IN, V.V.; KIKTENKO, V.S.

Materials on the classification of pathogenic leptospira in  
the U.S.S.R. Zhur. mikrobiol., epid. i immun. 40 no.1:28-32'63.  
(MIRA 16:10)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei  
AMN SSSR.

\*

KIKTENKO, V.S.; ANANIN, V.V.

Notes on the classification of pathogenic leptospirae in the  
U.S.S.R. J. hyg. epidem. (Praha) 8 no.3:326-331 '64

1. Lomonosov University and Gamaleya Institute of Epidemiology  
and Microbiology, Academy of Medical Sciences of the U.S.S.R.,  
Moscow.

KOVALEVSKIY, K.L.; KIKTENKO, V.S.

Reviews, criticism and bibliography. Zhur. mikrobiol., epid. i immun.  
41 no.3:148-150 Mr '64. (MIRA 17:11)

KIKTENKO, V.S.; LEVINA, L.F.

Evaluation of the effect of NaCl on the biology of Leptospira.  
Lab. delo no.3:177-178 '65. (MIRA 18:3)

1. Kafedra mikrobiologii (zaveduyushchiy - prof. V.S. Kiktenko)  
Universiteta druzhby narodov im. P. Lumumby, Moskva.

L 38307-65 ENT(1)/EWA(3)/EWA(b) JK  
ACCESSION NR: AP5013801

UR/0616/65/000/005/0151/0152  
614.71-078+614.71-084.481 (048)

AUTHOR: Kiktenko, V. S.; Kudryavtsev, S. I.

TITLE: Bacteriological investigation and disinfection of air by G. I. Karpukhin

SOURCE: Zhurnal mikrobiologii, epidemiologii i immunobiologii, no. 5, 1965, 151-152

TOPIC TAGS: bacteriology, air disinfection, air sampler, microbiology, aerosol

ABSTRACT: The authors review and evaluate Karpukhin's monograph. The first 4 chapters of the text contain detailed information on the hygienic and epidemiological significance of air microflora, theory of transmission of respiratory infections, physical and epidemiological characteristics of bacterial aerosols, and a survey of methods of trapping microorganisms in the air. The last 3 chapters are concerned with mechanical methods of removing microorganisms from the air, use of chemical bactericidal substances, and physical methods of disinfecting the air in enclosed spaces. The reviewers generally laud the monograph because it includes both published materials as well as Karpukhin's own observations. They state that his findings on bactericidal aerosols have both theoretical and practical value. "The

Card 1/2

I 58307-65  
ACCESSION NR: AP5013801

author's studies on the effectiveness of certain chemical agents (in aerosol form) are undoubtedly the foundation of the monograph and they will be read with interest by specialists in many fields of medicine." On the critical side, the reviewers charge the author with overemphasizing obsolete methods and devices for trapping microorganisms and ignoring the many new techniques recently developed. Published by McGraw, 1952, 256 pp.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: LS

NO REF SOV: 000

OTHER: 000

*AL*  
Card 2/2

KIKTENKO, V.S.

Survival of parasitic microbes in the external environment.  
Trudy Un.druzh.nar.7.Vop.med. no.1:171-180 '64. (MIRA 18:9)

1. Kafedra mikrobiologii Universiteta Druzhty Narodov imeni  
Patrisa Lumumby, Moskva.

LEBEDEV, Ye.A., otv. red.; BELYAYEV, Ye.A., red.; KOLEV, S.P.,  
red.; SAITYANSKAYA, I.M., red.; DIZHUR, I.M., red.

[Modern Jordan; a handbook] Sovremennaya Iordaniya; spravochnik. Moskva, Nauka, 1964. 190 p. (NIRA 17:9)

1. Akademiya nauk SSSR. Institut narodov Azii.

GLEYZER, G.I.; PARNO, I.K., SHTERNAL', A.F.; KIKU, G.S.; POLONSKIY, S.A.,  
tekhnicheskiy redaktor.

[Russian-Moldavian dictionary of mathematical terms for Moldavian  
secondary and advanced schools] Russko-moldavskii terminologicheskii  
slovar' po matematike; dlia moldavskikh srednikh i vysshikh uchebnykh  
zavedenii. Kishinev, Gos. uchebno-pedagog. izd-vo Moldavskoi SSR  
"Shkoala Sovietike", 1955. 76 p. (MLRA 9:6)  
(Russian language--Dictionaries--Moldavian)(Mathematics--Dictionaries)

PROCESSES AND PROCEDURES

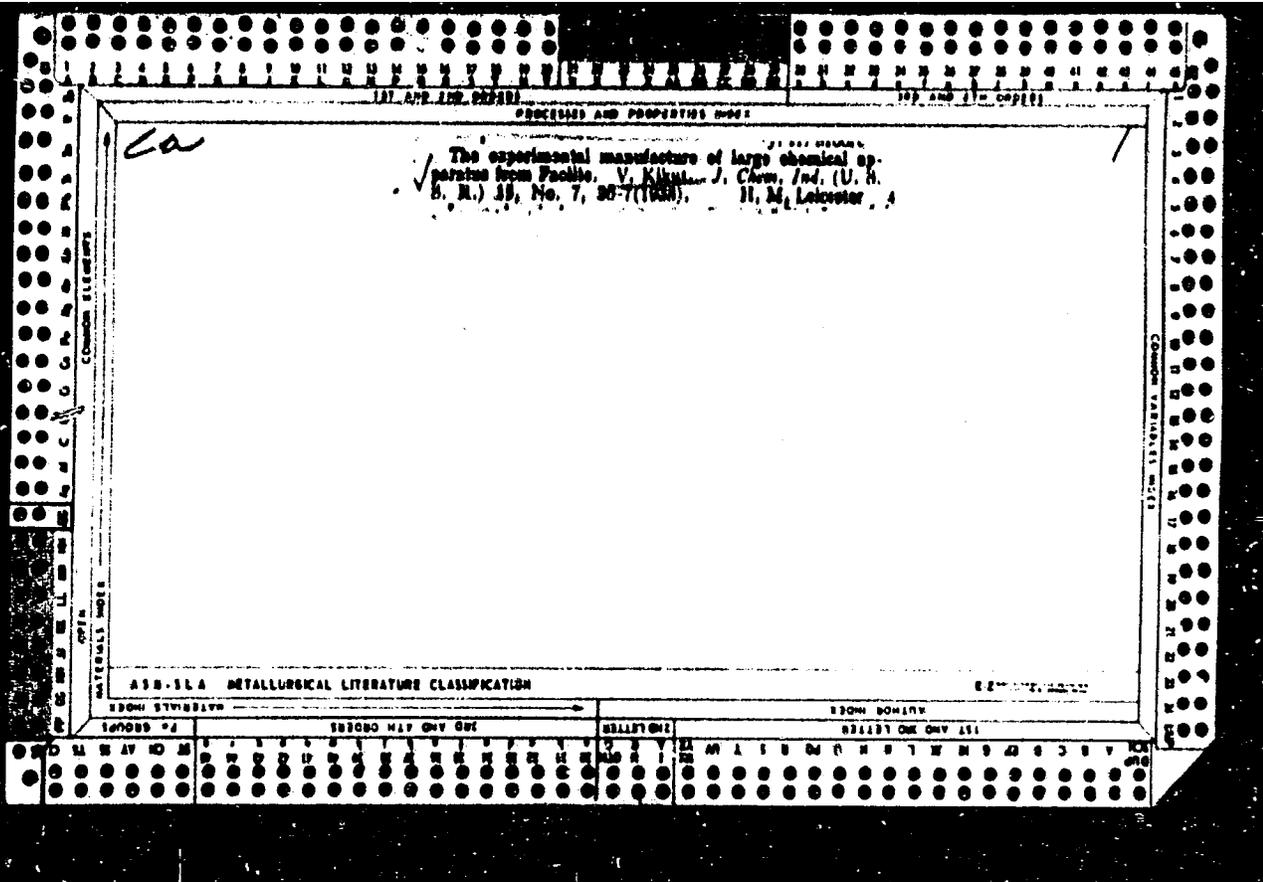
*CA*

The production of parts for chemical apparatus from asbestos-bakelite masses. V. Kikul. *Khim. Mashinostroenie* 1938, No. 6, 42-3; *Khim. Referat. Zhur.* 2, No. 6, 129 (1939).—A mixt. of equal amts. of phenol and 40% formalin with NaOH as catalyst (0.2% of the wt. of phenol) was boiled until a resin sepd.; this was dried at 35-40° and then heated at 90° until the required viscosity was acquired. The resin was mixed with an equal quantity of asbestos to form "faolite." Fans for Cl ventilation were prepd. by shaping the mass in wooden molds, drying at 75-80° for 7-8 hrs., smoothing with a rasp, and coating with bakelite lacquer. The wt. of these fans was 5.5 kg. against 12 kg. for ceramic fans. They are stable to an atm. of moist Cl, less expensive, lighter and stronger and can be rotated at greater speeds than the ceramic fans. A large assortment of anticorrosive articles can be prepd. from the faolite mass, which can successfully replace the ceramic ware, metal, etc.

W. R. Henn

METALLOGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----



SOV/81-59-16-59093

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 16, p 485 (USSR)

AUTORS: Kikut, V.A., Il'icheva, R.A.

TITLE: The Application of Glass Plastics in Chemical Industry

PERIODICAL: Za tekhn. progress (Sovnarkhoz Gor'kovsk. ekon. adm. r-na), 1958, Nr 5, p 28

ABSTRACT: A process of the manufacture of pipes from glass plastics is described, which consists in cutting an impregnated glass fabric into stripes which are wound on a straightening device for producing pipes. After polymerization in the furnace and cooling, the pipes are taken from the straightening device. The flanges are made of faolite or by winding the same fabric on the ends of the pipes. The finished pipes were tested in a very aggressive medium containing HCl (acid), chlorine and chlorine derivatives, in which they operated for several months, whereas steel pipes plated with lead served in the same medium  $\leq$  10 days. Glass plastics were tested also as ventilation pipelines under conditions where it was impossible to use vinylplastics, and in fan turbines. Disks

Ca: Card 1/2

184(7): 25(1) PAGE I BOOK EXPLANATION 807/3133

Korotkiy I. Substrate steels, abstrakt steels (Corrosion and Protection of Steel: Collection of Articles) Moscow, Mashin, 1977. 233 p. 7,000 copies printed.

Ed.: B.D. Tsasabor, Doctor of Chemical Sciences, Professor; Reviewers: A.A. Zhubovitskiy, Doctor of Chemical Sciences, Professor, and I.S. Pomarevna, Doctor; Ed. of Publishing House: Ya.G. Alaverlov; Tech. Ed.: S.M. Popova; Managing Ed. for Literature on Machine and Instrument Construction: B.V. Pokrovskiy, Engineer.

PURPOSE: This book is intended for scientific and technical personnel concerned with questions of the corrosion and protection of metals.

COVERAGE: The articles in this collection deal with the corrosion of steels in corrosive environments, investigations on the effect of various factors on corrosion, methods of protecting steels from gas and electrochemical corrosion. Special attention is given to new methods of investigation. A number of the articles give the results of studies made under operating conditions. New data, obtained by the Department of Metal Corrosion,

Mosterny Institute of Steel (Academy Institute of Steel), are published here for the first time. Four articles are the result of cooperation conducted jointly at the Laboratories of the "Soviet Steel" and the Khimnitskiy zavod Isral (Academy Institute of Steel) and the "Soviet Steel" and the Khimnitskiy zavod Isral M.Y. Radinov (Central Plant Isral M.I. Kalinin). Most of the articles contain practical recommendations on the protection of steels from corrosion. No personalities are mentioned. References follow each article.

TABLE OF CONTENTS:

Preface	3
Tsasabor, B.D. Theory of Corrosion and Ways of Increasing Corrosion Resistance of Metallic Alloys	5
Yermolaev, A.A. [Engineer] Zh.P. Zhuk [Candidate of Chemical Sciences], V.P. Zolotarev [Candidate of Technical Sciences], and Ye.M. Kamsterova [Engineer]. Effect of a Gaseous Medium on Properties of the Scaling of Stainless Alloys	30
Zhuk, S.P., and G.G. Lopovok [Engineer]. Sealing of 12L20VT Steel With a Change of Atmosphere	35
Chernykh, V.I. [Engineer]. Effect of Oxides on the Rate Corrosion of Iron and Iron-Resistant Steels	57
Kovalevich, G.S. [Engineer], V.P. Zhuk, and M.A. Potvinovskiy [Candidate of Technical Sciences]. Oxidation and Decarburization of 12L20VT Steels	71
Zasashvilya, V.D., and N.I. Zharinov [Candidates of Technical Sciences]. Corrosion of Metals in Fused Salts	99
Zhuk, S.P., G.M. Kiselev [Engineer], and P.G. Gubarevskaya [Engineer]. Alkali-Acid Pickling of Chromium Steels	110
Aradina, B.A. [Engineer], and V.A. Zhuk [Candidate of Technical Sciences]. Effect of External Factors on the Spontaneous Formation of Free Corrosion Steel During Pickling	132
Zasashvilya, V.D., and M.A. Potvinovskiy [Candidate of Technical Sciences]. Corrosion Resistance of Low-Alloy Steels	142
Zasashvilya, V.D., and A.A. Lokshin [Candidates of Technical Sciences]. Electrochemical Investigation of Atmospheric Corrosion of Metals	159
Tsasabor, B.D., and A.A. Lokshin. Effect of Cathodic Anodic Atmospheric Corrosion of Low-Alloy Steels	171
Tsasabor, B.D., M.M. Rozov [Engineer], S.M. Al'tomanskiy [Engineer], and A.P. Moskvichova [Engineer]. Passivity of Stainless Steels	185
Esasirin, V.I. [Engineer], and V.A. Tsvetov. Effect of Certain Factors on the Corrosion Fatigue of Iron Wire	204
Yermolaev, A.A. [Engineer], G.M. Kiselev, V.A. Zhuk, and V.I. Zhukovskiy [Engineer]. Effect of Oxygen on the Corrosion of 12L20VT Steel Under Conditions of Wet Spinning	222

RUSSIAN BOOK EXPLANATION 807/554

Kosobov, N. D., Doctor of Chemical Sciences, Professor, et al.  
Korbyts i zaschita konstruktivnykh metallicheskiykh materialov obrabotkiv  
staley (Corrosion and Protection of Constructional Metals). Collection of  
Articles. Moscow, Mashin, 1961. 298 P. Errata slip inserted. 10,000  
copies printed.

Ed. of Publishing House: N.P. Ievstaf'yeva; Tech. Ed.: O.V. Sidorova;  
Managing Ed. for Literature on Chemical and Textile Machine Building:  
V.I. Rybakova, Engineer.

PURPOSE: This collection of articles is intended for scientific and technical  
personnel concerned with the corrosion and protection of metals.

COVERAGE: The collection deals with problems of the corrosion of constructional  
metals in various environments and conditions. Articles discuss new methods  
for the investigation and testing of corrosion and give results of recent  
research conducted on the corrosion and protection of metal constructions.  
The corrosion of some new alloys is also considered. The collection includes  
articles generalizing the results of research conducted during the last 2-3  
years in the Department for Corrosion of Metals of the Kosobovskiy Institute  
of Steel (Moscow Steel Institute). Some of the articles were written in  
cooperation with the laboratory staffs of the "Serp i Molot" Plant and  
Khimicheskiy zavod in M.I. Kaluzina (Chemical Plant named M.Kaluzina) and  
are based on investigations conducted at these plants. No personalities are  
mentioned. There are 219 references, Soviet and non-Soviet. References  
accompany each article.

TABLE OF CONTENTS:

Foreword	3
Kosobov, N. D. [Doctor of Technical Sciences]. The [Process] Controlling Factors and the Protection of Metals Against Corrosion	5
GAS CORROSION DURING THE HEAT TREATMENT OF ALLOYS	
Abramov, O. V. [Engineer], and N. P. Zhuk [Candidate of Chemical Sciences]. Oxidation of Some Alloys During Heat Treatment in Gas and Electric Furnaces	19
Zhuk, N. P., and L. P. Iemel'yanskiy [Engineer]. The Effect of the Carbon Content in the Air on the Gas Corrosion of Carbon Steels	40
PICKLING OF SOME METALS AND ALLOYS	
Kuznetsov, G. G. [Engineer], N. P. Zhuk, and N. E. Lyubimikhin [Candidate of Technical Sciences]. Electrolytic Pickling of High-Alloy Metals	53
Kravchenko, E. G. [Engineer], M. A. Fedomyeva [Candidate of Technical Sciences], and P. S. Babitskiy [Engineer]. Pickling of Austenitic-Ferritic High-Speed Steels	72
Martynov, I. A. [Engineer], and N. P. Zhuk. The Effect of Haloid Ions on the Corrosive Behavior of 18Kh19Ti Steel During Pickling in Sulfuric Acid	95

Card 3/1

AVAILABLE: Library of Congress (DA62.T64)

16

Corrosion and Protection (Cont.) 867/5584

CORROSION RESISTANCE OF CERMIUM-NICKEL STEELS

Yedersky, M. A., and S. D. Tomashov. Corrosion of INELLOY Steel  
In Nitric-Acid Solution of CuSO<sub>4</sub> 108

Yedersky, M. A., and S. D. Tomashov. Effect of Deformation on the  
Intergrowth of Cerium-Nickel Steel 116

CORROSION RESISTANCE OF TITANIUM AND ITS ALLOYS

Tomashov, S. D., and L. A. Andreyev [Engineer]. High-Temperature  
Oxidation of Titanium 127

Tomashov, S. D., and M. G. Milvidskiy [Engineer]. Pickling of  
Titanium in Acid Solutions and in Alkaline Melts 133

Tomashov, S. D., E. M. Al'tovskiy [Engineer], A. V. Frovyrin  
[Engineer], and S. D. Shergin [Candidate of Chemical Sciences].  
Corrosion of Titanium and Its Alloys in Sulfuric Acid 151

Tomashov, S. D., E. M. Al'tovskiy, and V. Z. Vladimirov [Engineer].  
Investigation of Corrosion of Titanium and Its Alloys in Bromine  
Solutions in Methyl Alcohol 164

Tomashov, S. D., E. M. Al'tovskiy, G. B. Chernov [Candidate of  
Chemical Sciences], and A. D. Artyev [Engineer]. Corrosion Resistance  
of Titanium Alloyed With Vanadium, Chromium, and Palladium 173

CORROSION AND PROTECTION OF SOME METALS  
AND ALLOYS IN ACIDS AT ELEVATED TEMPERATURES

Titov, V. A. [Candidate of Technical Sciences], O. I. Jozov [Engineer],  
and S. D. Tomashov. The Corrosion of Tantalum, Niobium, and Their Alloys  
in Sulfuric Acid at Elevated Temperatures 187

Tomashov, S. D., and E. V. Strubelov [Engineer]. Investigating the  
Corrosion Rate of Iron-Carbon Alloys in Acids at Elevated Temperatures 196

Titov, V. A., I. M. Balashin [Engineer], and S. D. Tomashov.  
Investigating the Resistance of Various Metal-Protection  
Methods in Solutions of Sulfuric and Phosphoric Acids at  
Elevated Temperatures 200

CORROSION RESISTANCE OF STEEL

Titov, V. A., and S. D. Tomashov. Investigating the Endurance  
of Cold Wire 213

Titov, V. A., and E. M. Kozlov [Engineer]. The Effect of  
Hydrogenation on the Endurance of Steel 220

Titov, V. A., and V. V. Belikov [Engineer]. Corrosion of  
Steel in Contact With Copper 230

CORROSION AND PROTECTION IN CERTAIN  
BRANCHES OF THE CHEMICAL INDUSTRY

Milvidskiy, M. G., Z. I. Ignatova [Engineer], M. A. Yedersky,  
V. A. Titov, and V. A. Kiselev [Engineer]. The Use of Ultrasonic  
Method Corrosion for Steel Apparatus Used in the Production of  
Ammonium Chloride 245

Titov, V. A., A. A. Markovich [Engineer], and A. V. Frovyrin.  
Investigating the Corrosion Resistance of Certain Metals and  
Alloys in Benzene Production 254

AVAILABLE: Library of Congress (DA62,764)

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

AUTHORS: Mil'vidskiy, M. G., Ignatova, Z. I., Vedeneyeva, M. A., Titov, V. A.,  
Kikut, A. V.

TITLE: The use of urotropine to inhibit corrosion of steel equipment in  
ammonium chloride production

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 12, 1961, 53-54, abstract  
12I400 (V sb. "Korroziya i zashchita konstrukts, metallich. materia-  
lov", Moscow, Mashgiz, 1961, 245-253)

TEXT: The authors studied corrosion behavior of 1X18N9T (1Kh18N9T), X17  
(Kh17), 1X13 (1Kh13) steel grades and Armco-Fe in a  $\text{NH}_4\text{Cl} + \text{Na}_2\text{SO}_4$  solution. The  
possibility is shown of using 1Kh18N9T, Kh17 and Kh13 steels under the given  
conditions as sufficiently corrosion-resistant construction materials for the  
equipment. The use of urotropine as a corrosion inhibitor in the given media  
(at pH 6-8) is not effective for stainless steels. When large amounts of uro-  
tropine are added (up to 1%) the corrosion rate of the steels investigated drops  
by not over 2.5 times. The addition of urotropine in an insufficient amount may  
on the other hand entail a corrosion rate increase for Kh17, 1Kh13, and 1Kh18N9T

Card 1/2

The use of urotropine to inhibit corrosion ...

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

steel. The corrosion process proceeds with mixed cathode-anode control for stainless steels when using an evaporating apparatus, and with cathode control for grade 3 steel. The nature of the dependence of the corrosion rate on urotropine concentration and the effect of urotropine admixtures on electrode potentials and kinetics of electrode processes, lead to the assumption that urotropine is a mixed corrosion inhibitor under service conditions of an evaporation apparatus. There are 7 references. ✓

Ye. Layner

[Abstracter's note: Complete translation]

Card 2/2

S/852/62/000/000/007/020  
B136/B101

AUTHOR: Kikut, V. A.

TITLE: Tentative use of glass-reinforced plastics with polymeric binders for making parts of chemical apparatus

SOURCE: Primeneniye polimerov v antikorrozionnoy tekhnike. Ed. by I. Ya. Klinov and P. G. Udyma. Moscow, Mashgiz, 1962. Vses. sovet nauchno-tekhn. obshchestv., 56-60

TEXT: Glass fabrics of the types АСТТ(ш) (ASTT(shch)) (thickness, 9μ) and ТХ 90 (TKh 90) were used to make (1) bubbling tubes for distilling off benzene with live steam after chlorination, (2) fan wheels, and (3) tube sections for abnormally aggressive media. The glass fiber was impregnated with resin (35-40%) at 70 - 80°C. Tubes made of glass-reinforced plastics proved most suitable for distilling off benzene containing HCl by means of live steam, as well as for decomposing ammonium bisulfite and distilling off SO<sub>2</sub>. Fan disks made of glass-reinforced plastics were used in the production of bleaching powder for drawing off waste gases containing  
Card 1/2

Tentative use of glass-reinforced ...

S/852/62/000/000/007/020  
B136/B101

chlorine. These worked for more than eight months, whilst metallic wheels coated with bakelite varnish lasted only about two months. Tubes of glass-reinforced plastics for testing were manufactured by winding strips of impregnated glass fabric around wooden or metal cores. To improve their chemical stability in aggressive media, a strip of glass fabric 90 mm wide impregnated with phenol formaldehyde resin was wound onto a glass tube of 55/56 mm diameter and 2 m long, then thermally hardened. MGF-9 (MGF-9) polyester resin (16.5%) and methyl methacrylate (81.5%) with benzoyl peroxide (1.6%) and dimethyl aniline (0.4%) acting as catalysts were examined for their suitability as binding agents. These compounds are fairly stable in dilute acids,  $H_2SO_4$  (up to 50%), aqueous solutions of salts ( $(NH_4)_2SO_4$ ,  $NH_4HSO_3$ ,  $NH_4Cl$ ), and in aqueous solutions of  $SO_2$ . MGF-9 resin is combustible but its flammability can be reduced by adding vinyl perchloride. Resin of the latter with methyl methacrylate, made using these catalysts, can be used as a binder even without MGF-9 resin and costs only one-third as much as MGF-9.

Card 2/2

L: 35003-55 ENI(m)/EPR(c)/EHA(d)/EPP(s)/EPR(z)/EPR(b) H.W./J.D./M.B.  
ACCESSION NO: AP5016022 UR/0125/65/000/006/0077/0077  
672.3,620.191/.193,001.4 30

AUTHOR: Nedovar, B. I. (Doctor of technical sciences); Langer, N. A. (Candidate of technical sciences); Yushkevich, Z. Y. (Engineer); Xikun, V. A. (Engineer)

TITLE: Corrosion tests of welded joints of 00Kh25N20 steel in nitric acid

SOURCE: Avtomaticheskaya svarka, no. 6, 1965, 77

TOPIC TAGS: stainless steel, austenitic stainless steel, intercrystalline corrosion susceptibility, knife corrosion susceptibility, low carbon stainless steel/00Kh25N20 steel, 1Kh18N9T steel

ABSTRACT: Heat-treated (6500 for 2 hr) and untreated TIG-welded joints of 00Kh25N20 steel containing 0.018, 0.030, 0.045, or 0.055% C were tested for corrosion in nitric acid. Some specimens were completely submerged in 54--56% nitric acid at 100--105C for 2445 hr. Other specimens were placed in the vapor of 64--65% nitric acid at 120--125C for 3154 hr. For comparison, welds of 1Kh18N9T [AISI 321] steel were tested under identical conditions. The submerged 25-20 type steel did not change its appearance and exhibited no susceptibility to intercrystalline or knife corrosion. The corrosion rate varied from 0.01 to 0.04 g/m<sup>2</sup>.hr and was prac-

Card 1/2

1-56003-43  
ACCESSION NR: AP5016022

tically twice as high for heat-treated specimens (0.02—0.10 g/m<sup>2</sup> hr). The welds of 1Kh18N9T steel were susceptible to knife corrosion. After testing in the gas phase, the steels containing less than 0.03% C preserved their appearance, but the surface of all other steel was corroded, particularly steel with 0.055% C and 1Kh18N9T steel. In tests in the vapor phase, the corrosion rate varied from 0.06 to 0.10 g/m<sup>2</sup> hr, 2.37 g/m<sup>2</sup> hr for steel containing 0.055% C and 1.12 g/m<sup>2</sup> hr for 1Kh18N9T steel. Thus, the test under industrial conditions showed that welds of low-carbon austenitic steels of the 00Kh25N20 type containing less than 0.03% C are impervious to intercrystalline and knife corrosion in reactive and 65% nitric acid. Orig. art. has 1 table. [MS]

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MK

NO REF SOV: 001

OTHER: 000

ATD PRESS: 4034

1/12



KIKVIDZE, A.V.  
ARESHIDZE, Kh.I.; KIKVIDZE, A.V.

Studying gumbrin and askanite as dehydration, isomerization and alkylation agents. Part 6. Obtaining ethyl ether from ethyl alcohol in the presence of gumbrin [in Georgian with summary in Russian]. Trudy Inst. khim. AN Gruz.SSR 11:37-43 '53. (MLRA 10:2)

(Gumbrin) (Ethyl ether) (Alkylation)

KIKVIDZE, A.V.; ARESHIDZE, Kh.I.

Studying gumbrin and askanite as dehydration, isomerization and alkylation agents. Part 5. Alkylation of aniline with methyl alcohol in the presence of gumbrin [in Georgian with summary in Russian]. Trudy Inst. khim. AN Gruz.SSR 11:45-49 '53.

(MLRA 10:2)

(Gumbrin) (Alkylation) (Aniline)

KIKVIDZE, A.V.

Gumbrin and askanite as dehydrogenation, aromatization, and alkylation catalysts. V. Alkylation of aniline with methyl alcohol in the presence of gumbrin. A. V. Kikvidze and Kh. I. Areshidze. *Zhur. Akad. Nauk* 23, 599-7(1954); cf. 24, 42, 633ig, 41, 61331. Gumbrin formed into pellets (2-3 mm.) was used as the catalyst in a reaction tube heated to 350-450° through which a 1:1 mixt. of MeOH-PhNH<sub>2</sub> was passed. At 350° with 0.075 space velocity of the mixt. 37.9% PhNHMe and 3.9% mixed toluidines were formed. At 400° 46% of the former and 10.4% of the latter are obtained, while at 450° the yields are 28.9% and 14.05% resp. No PhNHMe was formed. (I. M. Kabanov)

KIKVIDZE, A.V.

USSR/Chemical Technology - Chemical Products and Their Application: Treatment of Natural Gases and Petroleum. Motor and Jet Fuels. Lubricants. I-8  
 APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000722520010-2"

Abs Jour : Ref Zhur - Khimiya, No 1, 1958, 2532

Author : Areshidze, Kh.I., Kikvidze, A.V.

Inst : Institute of Chemistry, Academy of Sciences Georgian SSR

Title : Structure of Paraffinic Hydrocarbons of the 200-250° Fraction of Patara-Shirakskaya Petroleum.

Orig Pub : Tr. in-ta khimii AN GruzSSR, 1957, 13, 195-205

Abstract : The dearomatized 200-250° fraction of Patara-Shirakskaya petroleum and also the narrow fractions having the boiling ranges of the expected n-paraffins, were treated with urea (in the proportion of 1:10.5) to form the complex. By this treatment it was not possible to isolate the n-paraffin hydrocarbons. By determination of the aniline

Card 1/2

Abstract: *Armedizh, no. 11, 1957, p. 115-116, 117, 118, 119.*

Subject: hydrocarbons of the decalin series in the presence of  
(hydroaromatic hydrocarbons) in the presence of

of the hydroaromatic hydrocarbons, 1957, p. 115-116, 117, 118, 119.  
pp. 115-116 (USSR)

Abstract: The thorough investigation of the chemical composition of the  
oil fractions with a boiling point above 110°C is one of the  
most urgent and important problems of the chemistry of petro-  
leum. The authors have proved that the fraction 150 - 200°C of  
the oil in question contains 23.6% of hydro-aromatic hydro-  
carbons. The present investigation is intended for the deter-  
mination of the individual nature of these hydrocarbons. It  
was of interest to find out whether the presence of condensed  
aromatic hydrocarbons and of their hydrated analogues  
(Refs 1,2) are specific only for the bituminous petroleum of  
Sarekhan, or for other kinds of petroleum as well. The inves-  
tigation has proved the above mentioned compounds to be present  
in the oil under consideration, namely decalin, 4-methyldecalin,  
1,5 and 1,7 dimethyldecalin. The naphthene-hydrocarbons con-  
tained in the petroleum of various oil fields in USSR are

Car: 1/2

Hydrocarbons of the Decalin Series in the Mirzaan Oil 007/20-121-6-20/45

studies in the Laboratory imeni S.S. Nametkin of the Oil Institute of the AS USSR. There follows a short survey of publications (Refs 2,3). Table 1 shows the properties of the fraction 150-200° of the Mirzaan oil before and after the catalysis. The group-composition of the tested fraction in 3 has been computed from the depression of the aniline points, using the corresponding coefficients: aromatics 15,1; hydroaromatics 23,6; remaining cyclanes 27,3; paraffinoids 34,0; hydroaromatics: Total amount of cyclane = 46,4. There are 2 tables and 8 references, 5 of which are Soviet

ASSOCIATION: Institut khimii im. P.G. Melikishvili Akademii nauk GruzSSR (Institute of Chemistry imeni P.G. Melikishvili of AS, Gruzinskaya SSR)

PRESENTED: April 24, 1958, by S. A. Kazunskiy, Member, Academy of Sciences, USSR

SUBMITTED: April 24, 1958.

Card 2/2

ARSHIDZE, Kh.I.; KIKVIDZE, A.V.

Hydrocarbons of the naphthalene series and benzene derivatives  
of Mirzaani crude. Dokl. AN Azerb. SSR 15 no.4:307-310 '59.  
(MIRA 12:6)

1. Institut khimii im. P.G. Melikishvili AN Gruzinskoy SSSR.  
Predstavleno akademikom AN Azerbaydzhanskoy SSR Yu.G. Mamedaliyevym.  
(Petroleum--Analysis) (Naphthalene) (Benzene)

S/081/61/000/023/044/061  
B138/B101

AUTHORS: Areshidze, Kh. I., Kikvidze, A. V.

TITLE: Hydrocarbons of the cyclohexane series in Mirzaani petroleum

PERIODICAL: Referativnyy zurnal. Khimiya, no. 23, 1961, 447 abstract  
23M63 (Soobshch. AN GruzSSR, v. 26, no. 1, 1961, 11 - 22)

TEXT: The individual nature of representative cyclohexane homologs in the 150 - 200° fraction of Mirzaani petroleum have been established by the dehydrogenation catalysis, chromatographic adsorption, picrate and critical methods. The hexahydro-aromatic hydrocarbons of this fraction were studied at the same time. The presence of isopropyl-, n-propyl-, methyl- 2-ethyl- and 1-methyl-3-ethylcyclohexanes was established. [ Abstracter's note: Complete translation. ]

Card 1/1

S/081/62/000/013/039/054  
B156/B101

*11.0120*

AUTHORS: Areshidze, Kh. I., Benashvili, Ye. M., Kikvidze, A. V.

TITLE: The isomerization of homologous compounds of cyclopentane included in the composition of Norio and Mirzaani gasolines, carried out in the presence of gumbrin

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 13, 1962, 530, abstract  
13M171 (Tr. In-ta khimii AN GruzSSR, v. 15, 1961, 189-202)

TEXT: It has been established that the cyclopentane hydrocarbons (CH) contained in the 60-150°C Norio gasoline fraction are 19.8 % isomerized into hydroaromatic hydrocarbons in the presence of gumbrin and 29.5 % isomerized into the hydroaromatic carbons when in contact with gumbrin activated with 25 % HCl. In the presence of activated gumbrin there is 40 % isomerization of the CH included in the composition of the dearomatized catalyzate from the 150-200°C Norio petroleum fraction. On investigating the isomerization of the CH included in the composition of Mirzaani petroleum (the 60-150°C fraction) into cyclohexane hydrocarbons it was found that the maximum isomerization effect occurs in the presence of gumbrin activated by 30 %

Card 1/2

ARESHIDZE, Kh.I.; KIKVIDZE, A.V.

Thermal decomposition of tetradecane. Soob. AN Gruz. SSR 38  
no.1:77-84 Ap '65. (MIRA 18:12)

1. Institut fizicheskoy i organicheskoy khimii imeni Melikishvili  
AN GruzSSR. 2. Chlen-korrespondent AN GruzSSR (for Areshidze).  
Submitted Nov. 30, 1964.

KIKVADZE, K. Ya.: <sup>(V. 1)</sup> ~~Master~~ Agric Sci (diss) -- "Irrigation of grapes under the soil-climatic conditions of the Mukhran plain, Georgian SSR". Tbilisi, 1958, published by the Georgian Agric Inst. 29 pp (Min Agric USSR, Georgian Order of Labor Red Banner Agric Inst), 100 copies (KL, No 6, 1959, 138)

DREYZIN, R.S.; YANKEVICH, O.D.; KIRVADEE, I.I.

Outbreak of diseases caused by respiratory syncytial virus.  
Vop. virus. 10 no. 6:708-716 N-D '65 (MVA 1965)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR, Moskva.  
Submitted March 25, 1965.

RIKVALE, V.

Machine-Tractor Stations

Estimating the average demand for tractors in the grain district machine tractor stations. Sots. nauk. zhurn. 23, no. 6, 1972.

RUSSIAN FEDERATION SOCIAL SCIENCES ACADEMY, DEPARTMENT OF ECONOMICS, SURVEY, 1972. UNCLASSIFIED.

1. KIKVADEE, V.
2. USSR (600)
4. Machine-Tractor Stations
7. Possibilities for lowering operation costs of machine-tractor stations.  
Sots. sel'khoz. 24, No. 1, 1953.

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

KIKVADZE, Z. A. and KASSIRSKIY, I. A.

"Clinical use of biomyacin," appears in TABCON of "Biomyacin (Experimental Study and Clinical use of Biomyacin)", edited by A. F. Bilibin, Moscow 1954.

SO: Translation-417, 21 Jun 1955.

KIKVADZE, Z. A.

KASSIRSKIY, I.A., professor (Moscow); VAYSBERG, G.M., kandidat meditsinskikh nauk (Moscow); KIKVADZE, Z.A. (Moscow)

Biomycin in clinical internal diseases. Klin. med. 32 no.5:35-44  
My '54. (MLRA 7:7)

1. Iz terapevticheskoy kliniki (sav. saslushennyy deyatel' nauki prof. I.A.Kassirskiy) Tsentral'nogo instituta usovershenstvovaniya vrachey na base Tsentral'noy klinicheskoy bol'nitsy imeni Semashko Ministerstva puti soobshcheniya SSSR.  
(CHLORTETRACYCLINE, therapeutic use.)  
\*

KIKVIDZE, A.Ya.; EBANOIDZE, L.I., red.; CHKHANDZE, M.R., red. izd-  
va; BERIDZE, N.P., tekhn. red.

[Organization of collective farms in Georgia] Kolkhoznoe  
stroitel'stvo v Gruzii. Tbilisi, Izd-vo Tbilisskogo gos.  
univ., 1961. 51 p. (MIRA 15:7)  
(Georgia--Collective farms)



KIKVIDZE, R. YE.

PA 192T58

USSR/Physics - Dispersion

1950

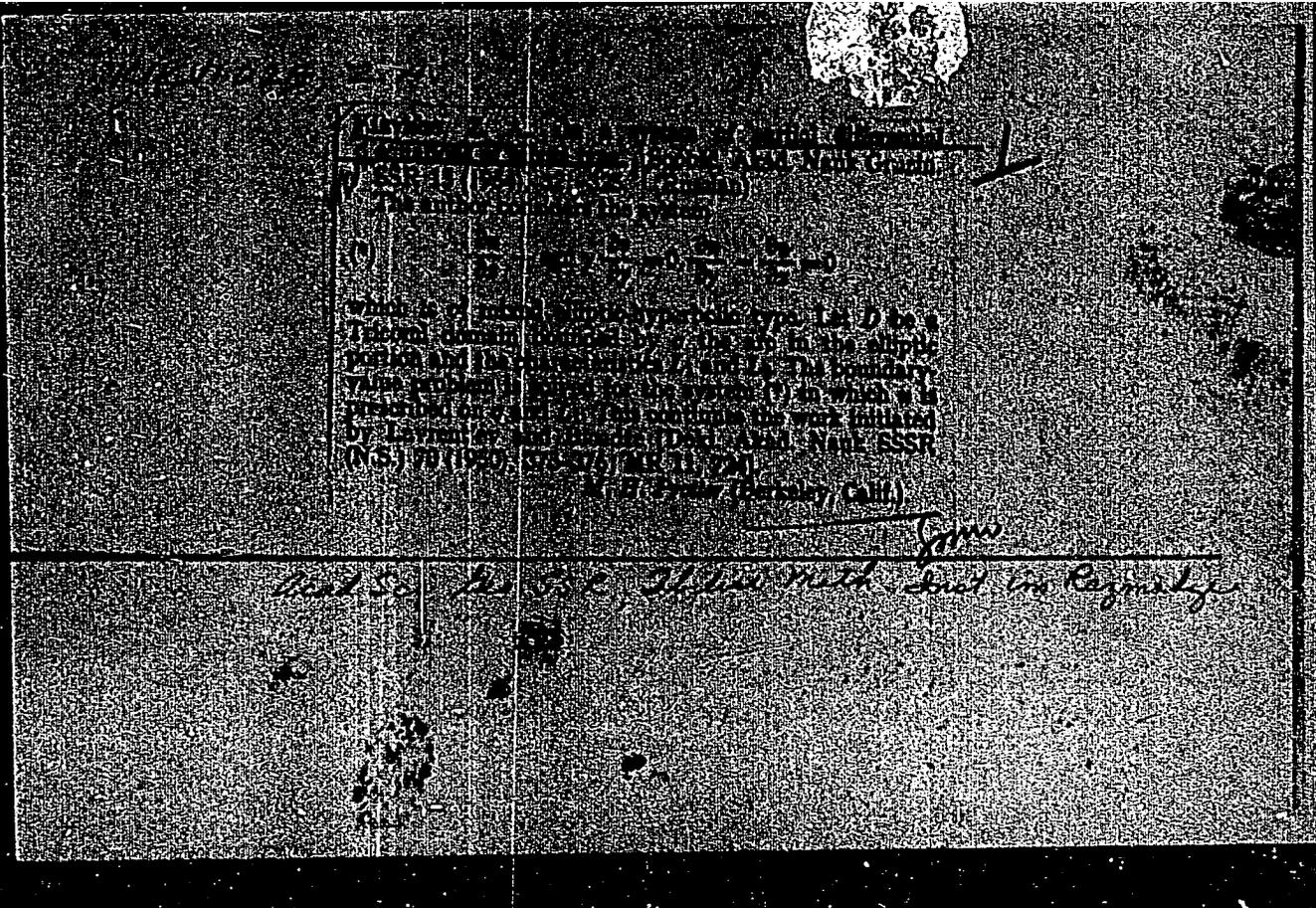
"Influence of Rotator's Amplitude of Oscillation on the Function of Distribution in an Alcohol Suspension," P. Ye. Kikvidze, Inst of Phys and Geophys, Tbilisi, Acad Sci Georgian SSR

"Soob Ak Nauk Gruz SSR" Vol XI, No 1, pp 11-16

Concludes that increase of amplitude for identical particle dimensions and same duration of agitation causes alcohol suspensions to form with increasing effective sp surface, and that after the max is reached the effective sp surface of the particles of the alc suspension gradually decreases as a result of aggregation. Submitted 16 Jun 49 by N. G. Kutateladze, Act Mem, Acad Sci Georgian SSR

TC

192T58



L 22906-65 EPF(c)/EWG(a)-2/EWP(j)/EWT(a)/T Pc-4/Pr-4/PW-4 RM  
ACCESSION NR: AP5001775 S/0097/64/000/007/0334/0334

AUTHORS: Topchiashvili, M. I. (Engineer); Kikvilashvili, G. M. (Engineer)

TITLE: Plastic solutions with andesite filler E  
B

SOURCE: Beton i zhelezobeton, no. 7, 1964, 334

TOPIC TAGS: andesite, binder material, filler additive, filler, epoxy resin / ED6 epoxy resin

ABSTRACT: The authors present some physical and mechanical properties of plastic solutions with andesite fillers. Andesite is regarded as a favorable filler due to its durability and other properties. The physical-mechanical descriptions of andesite are presented in a table. The andesite used in the tests was taken from the Bakuriyanskiy territory, GSSR, and was crushed to the screenings given in Table 1 on the Enclosure. Epoxy resin ED-6 with plastifier and solvent was used as a binder. The binder was stirred at 50-600 until a homogeneous mixture was obtained. The already prepared andesite was added, and stirring was continued until the solvent completely disappeared. Samples were prepared by pressing at 300 kg/cm<sup>2</sup> for 30 seconds, after which the samples were kept in air at +100 for

Cord. 1/A

I 22906-65

ACCESSION NR: AP5001775

three days, then heated at 100C for two hours. After cooling, the samples were measured for physical-mechanical properties. Measurements conducted include: unit weight, compressive strength limit in dry air at +20C, tensile strength limit, impact viscosity, % water absorption, and Brinell hardness. The properties were compared with those of 1) the same substance prepared without pressing, and 2) pressed piastocrete with ordinary sand filler. Significant increases of desirable properties were realized with the pressed ED-6 with andesite. The use of andesite permits the attainment of high strength at low cost due to the need for a small relative proportion of expensive binder. The authors recommended using the material for industrial and hydrotechnical structures, and also in the chemical industry and other commercial applications. Orig. art. has: 3 tables.

ASSOCIATION: TWISGEI

SUBMITTED: 00

NO REF SOV: 000

ENCL: 01

OTHER: 000

SUB CODE: MT

Card 2/3

22906-65  
ACCESSION NR: AP5001775

ENCLOSURE: 01

Table 1  
Fractional composition of andesite

Screen size in mm.	0.3	0.2	0.15	0.09	0.09
Portion remaining in %	18.6	15.0	10.9	8.5	47.0

Card 3/3

KIL', A. KH.

Spravochnoye posobiye po sostavleniyu smet na kapital'noye stroitel'stvo  
(Reference manual for the compilation of estimates on capital construction, by)  
Ye. S. Dunayev, S. A. Yefremov, A. Kh. Kil', I. A. Petrov. Pod Obshey Red. S.  
N. Reynina. Moskva, Gosstroyizdat, 1954.

514 P. Tables.

N/5  
748.101  
.D8

MALYUGIN, V.I.; YEFREMOV, S.A., kand. tekhn. nauk; REYNIK, S.F.;  
BUKSHTEYN, D.I.; DUNAYEV, Ye.S.; KIL', A.Kh.; KRACOVICH,  
A.A.; FILIMONOV, S.Ye.; PETROV, I.A., prof., doktor  
tekhn. nauk, nauchn. red.; GIROVSKIY, V.F., prof., doktor  
ekon. nauk, nauchn. red.; GERASIMOVA, G.S., red. izd-va;  
GOL'BERG, T.M., tekhn. red.

[Manual for estimated costs in construction] Spravochnik  
po smetnomu delu v stroitel'stve. Moskva, Gosstroizdat,  
Pt.2. 1963. 162 p. (MIRA 16:12)

1. Akademiya stroitel'stva i arkhitektury SSSR. Nauchno-  
issledovatel'skiy institut ekonomiki stroitel'stva.  
(Construction industry--Costs)

KIL', I.

First steps. Okhr.truda i sots.strakh. no.6:33-35 D '58,  
(MIRA 12:1)

1. Zaveduyushchiy otdelom okhrany truda Krasnodarskogo  
krayevogo sovprofza.

(Krasnodar Territory--Agricultural laborers)  
(Industrial hygiene)

KIL', I.

Ready to get out into the fields. Okhr. truda i sots. strakh. 3  
no.5128-32 My '60. (MIRA 13:12)

1. Zaveduyushchiy otdelom okhrany truda Krasnodarskogo kryasovprofa.  
(Krasnodar Territory--Farm mechanization--Safety measures)

Translation from: Referativnyy zhurnal. Metallurgiya, 1958, Nr 12, p 51 (USSR) SOV/137-58-12-24282

AUTHORS: Boldin, V. V., Gus'kov, V. M., Gupalo, I. P., Kul', I. G., Nikiforov, V. P.

TITLE: Development and Improvement of Electrolytic Aluminum Production in USSR Plants (Razvitiye i usovershenstvovaniye elektroliticheskogo polucheniya alyuminiya na zavodakh SSSR)

PERIODICAL: V sb.: Legkiye metally. Nr 4. Leningrad, 1957, pp 56-61

ABSTRACT: Design and experimentation toward development of a powerful 120-130,000 amp cell with top delivery of current is coming to a conclusion. In these baths the gas take-off is right over the crust of the electrolyte. This arrangement sharply reduces the amount of gas loss and increases the concentration of fluorine compounds in the gases. This makes regeneration of fluorine salts from them a real possibility. 1952-55 saw a jump in electrolysis engineering, and the major aluminum plants began to increase anode cd to 0.9-1.0 amps/cm<sup>2</sup> with simultaneous acidification of the baths to cryolite ratios (NaF:AlF<sub>3</sub>) of 2.3-2.5, and reduction in the number of anode effects to 0.2-0.5 per bath per day. The Al level in the bath is held

Card 1/2

SOV/137-58-12-24282

Development and Improvement of Electrolytic Aluminum Production in USSR Plants

at about 20 cm and the bath level at 20-25 cm. Cells now in operation are to gain 20% in output in the immediate future by increase in current intensity. This will require reduction in the distance between electrodes, introduction of special additives into the cells to increase electroconductivity or current efficiency, increase of anode width up to 300 mm, increase in anode-rod size and change in shape thereof, and increase in the cross section of cathode rods.

I. G.

Card 2/2

KHODYKO, A.D.; BERNSHTEYN, Ya.A; ZAYTSEV, V.N.; KIL', I.G.

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000722520010-2"

Additional data on the new French Aluminum Plant in Nogor.

TSvet. met. 34 no.3:94-95 Mr '61.

(MIRA 14:3)

(France—Aluminum industry)

KIL', I. T.

Case of anterolateral perineal hernia, Zdrav. Kazakh, no.4:  
70-71 '62. (MIRA 15:6)

1. Iz kafedry fakul'tetskoy khirurgii (zav. - professor A. B.  
Rayz) Kazakhskogo meditsinskogo instituta.

(HERNIA)

KIL', N.A., inzh. (Moskva)

Calculating a dome for local loads. Rasch. prostr. konstr. no.9:  
45-60 '64. (MIRA 17:11)

CHUMBALOV, T.K.; KIL', T.A.

Chemical composition of the "kermek" (*Statice Gmelini* Willd)  
tanning root. Part 1: Flavone dyes. *Izv.vys.ucheb.zav.; khim.i*  
*khim.tekh.* 5 no.1:150-154 '62. (MIRA 15:4)

1. Kazakhskiy gosudarstvennyy universitet imeni Kirova, kafedra  
organicheskoy khimii.

(Flavones)

CHUMBALOV, T.K.; KIL', T.A.

Chemical composition of the *Statice gmelini* Willd tanning root.

Part 2: Leucoanthocyanidins. *Izv.vys.ucheb.zav.;khim.i khim.tekh.*

5 no.2:318-321 '62.

(MIRA 15:8)

1. Kazakhskiy gosudarstvennyy universitet imeni Kirova,  
kafedra organicheskoy khimii.

(Tanning materials) (Leucoanthocyanidins)

SHUL'TS, Yu.F.; MERTSALOVA, T.V.; SAVEL'YEVA, L.L. Prinimali uchastiye:  
SIZYAKINA, Ye.S.; KILACHITSKAYA, I.R.; MILLER, T.A., red.;  
LYUDKOVSKAYA, N.I., tekhn. red.

[Textbook of the Latin language] Uchebnik latinskogo iazyka.  
Pod obshchei red. Yu.F. Shul'tsa. Moskva, Medgiz, 1962. 203 p.

(MIRA 15:10)  
1. Kollektiv kursa latinskogo yazyka Vtorogo Moskovskogo  
meditsinskogo instituta imeni N.I. Pirogova (for Shul'ts,  
Mertsalova, Savel'yeva, Sizyakina, Kilachitskaya).  
(LATIN LANGUAGE--GRAMMAR) (MEDICINE--LANGUAGE)

LIST AND INDEX CONTENTS      PROPERTIES AND PROPERTIES INDEX

KILADZE D. N.

BC B-I-7

Rapid determination of small quantities of sulphates. N. A. TAMANARY and D. N. KILADZE (J. Appl. Chem. Russ., 1934, 7, 1806-1810).—1-3 g. of substance (cement, dolomite, basic slag, glass, or other silicates) are treated with aq. acid, SiO<sub>2</sub> is separated, and BaCl<sub>2</sub> is added to the filtrate, which is then evaporated to dryness. 1 ml. of 10% HCl and 25 ml. of H<sub>2</sub>O are added to the residue, the suspension is filtered, and the BaSO<sub>4</sub> weighed. R. T.

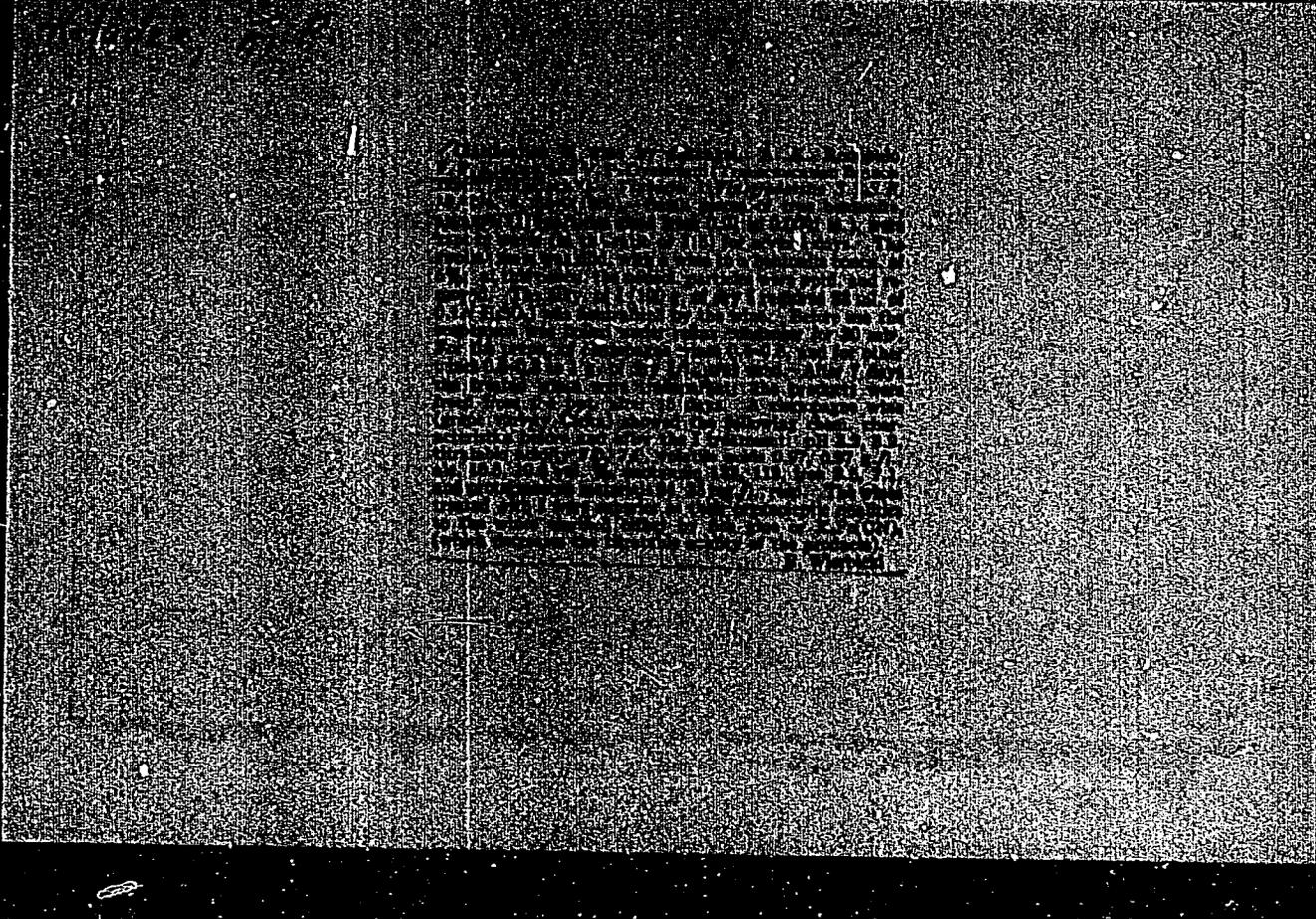
A.S.B.-S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

STONY DIVISION      SECTION BOWEN

147000 24      147000 24

M A N A V H D A S      M A N A V H D A S





GAPRINDASHVILI, V.N.; KILADZE, D.N.; KURDEVANIDZE, M.K.

Problem of the complete treatment of TSnelissk sepentinites.  
Trudy Inst.prikl.khim.i elektrokhim.AN Gruz.SSR 3:73-85 '62.  
(MIRA 16:1)  
(Georgia—Sepentinites)

Kiladze, F. P.

✓ Comparative investigation of bentonites as clarifying agents for wine. A. K. Rodopulo, V. P. Gvecliani, and F. P. Kiladze. *Vestnik i Vinogradarstvo* 11, No. 4, 13-14 (1961). *Chem. Zvest.* 1951, 11, 8264; cf. *C.A.* 48, 14100. Expts. are reported on the clarification of Cisca champagnes, white European (Chimuri), red Kakhetian, and ordinary (Zoliani) wines with bentonites (I), sub-bentonites (II), askani (III) and askan glue, Akmarov white (IV) and green, and various green glues. The best swelling was obtained with III and IV. The suspensions were prepd. by diln. with 10 parts water (6 parts in the case of the subbentonites). From 40 to 200 g. I and 200-300 g. II were used per hectoliter, with the suspension first being shaken 15 min. with an equal vol. of wine and then for 20 min. with the total vol. being treated, after which it was allowed to settle. The champagnes were clarified in 8-10 days; 15-18 days were required for clarification with fish glue. The addn. of 2 g. I and 0.06 g. fish glue per l. clarified the wine within 1 hr. III was most effective in clarifying the red wine. I reduced titratable acid by 0.06-0.58%, increased Ca content by 10-14 mg./l. and the ash and ext. contents by 0.03-0.08 g./l., and sharply reduced the high Pn contents (from 27 to 2-7 mg./l. for ordinary wines). III was especially effective in this respect. The reduced protein N by 6-18 mg./l. At high values for titratable acid (7.5-9.0%), clarification with I gave better results. III clarified champagnes in 15 days (35 days for fish glue). It therefore, was found to be a very satisfactory clarifying agent and was more effective than fish glue and gelatin.

M. C. Moore

2

KILADZE, N. SA.

AUTHORS: Muskhelishvili, G.N. and Kiladze, N.S. 120 9 19/55

TITLE: Instrument for Measuring Inductance and Capacitance (Pribor dlya izmereniya induktivnosti i kondensit)

PERIODICAL: Pribery i Tekhnika Eksperimentov, 1955, No. 5, pp. 75 - 78 (USSR)

ABSTRACT: For measuring inductances between  $10^{-3}$  and 1.0 H and capacitances between  $10^{-7}$  and  $10^{-2}$  F with an error not exceeding 2.5%. The inductance may easily be extended up to several hundred Henrys. The advantage of the method over a bridge is that only one adjustment is required in taking a reading. All measurements are made at 5 kc/s. The vector diagram of Fig. 1 shows that for a constant current, the voltage across a coil would be a measure of its inductance were it not for the effect of iron resistance. The block diagram of Fig. 2 shows how the undesirable quadrature component may be compensated for by deriving an antiphase sample and adding to the terminal voltage of the coil. When the compensated terminal voltage goes through a minimum as the amount of sample is varied, that minimum value is a measure of the inductance of the coil. A similar argument holds for condensers except that the relation between voltage and capacitance is reciprocal. Fig. 3 shows the complete circuit of the

Card 1/2

Instrument for Measuring Inductance and Capacitance

instrument using 3 twin-diode type 6EM7 and 2 triodes type 6P17. The measuring frequency is stabilized by a quartz crystal type K-55. Much higher inductance may be measured with rather greater error by using the same frequency direct. The capacitor scale could be made linear if desired by operating from constant voltage. The main idea is due to J.M. Marshall (Ref. 1). There are 6 figures and 1 non-Slavic reference.

ASSOCIATION: Institute of Physics Ac. Sci. Georgian SSR (Institut fiziki AN Gruz SSR)

SUBMITTED: March 11, 1955.

AVAILABLE: Library of Congress  
Card 2/2

KILADZE, N. SA.

MUSKHELISHVILI, G.N.; KILADZE, N.S.

KILADZE, N.Sh.

A device for recording transistor characteristics. Trudy Inst.  
elek., avtom. i telem. AN Gruz. SSR 3:67-74 '62. (MIRA 16:5)  
(Transistors)

22876

S/089/61/010/005/004/015  
B102/B214

21.3200

AUTHORS: Gverdtaiteli, I. G., Nikolayev, Yu. V., Oziashvili, Ye. D.,  
Ordzhonikidze, K. G., Muskhelishvili, G. N., Kiladze, N. Sh.,  
Mikirtumov, V. R., Bakhtadze, Z. I.

TITLE: An automatic cascade apparatus for obtaining highly  
concentrated heavy nitrogen isotope

PERIODICAL: Atomnaya energiya, v. 10, no. 5, 1961, 487-492

TEXT: The growing use of  $N^{15}$  in different domains (for example,  $N^{15}$   
nitrates in homogeneous reactors;  $N^{15}$  has a thermal neutron capture cross  
section of  $2 \cdot 10^{-5}b$ , whereas the value for natural nitrogen is 1.8 b) makes  
it of interest to develop suitable methods for the preparation of this  
isotope. The principal difficulty lies in the smallness (0.365%) of  $N^{15}$   
content in the natural nitrogen. Spindel and Taylor (Ref. 1: W. Spindel,  
T. Taylor. J. Chem. Phys., 21, 981 (1955); 24, 626 (1956); Trans. N. Y.  
Acad. Sci., 19, 3 (1956); T. Taylor, W. Spindel. Proceedings of the

Card 1/4

22876

S/089/61/010/005/004/015

B102/B214

An automatic cascade apparatus for...

International Symposium on Isotope Separation. Amsterdam, North - Holland Publishing Company, 1958, p. 158; L. Kauder, T. Taylor, W. Spindel. J. Chem. Phys., 11, 232 (1959)) have developed a cascade apparatus with two columns allowing  $N^{15}$  to be obtained with 99.8 % purity. On this basis the authors of the present paper have developed and constructed an automatic cascade apparatus that allows 99.8 % pure  $N^{15}$  to be obtained from natural nitrogen by the method of  $NO-HNO_3$  exchange. The yield is about 0.5 g per day. The chemical exchange  $NO-HNO_3$  is described in Ref. 1, and also in the introduction of the present paper. Fig. 2 shows the scheme of construction of the actual automatic apparatus; 3 and 6 (in Fig. 2) correspond to the first and the second column of the cascade. The  $HNO_3$  is conveyed from the reservoir 1 to the first column via a regulating valve 4 and a flow meter 2. The enriched solution is taken through a regulating valve 5 and a second flow meter 2 to the upper part of the second column for further enrichment, the remaining part flowing through the sleeve pipe 7 into the reactor. In the reactor  $10 HNO_3$  reacts with  $SO_2$ . The oxide

Card 2/4

S/089/2276  
R10/005/004/015  
B122/B214

An automatic cascade apparatus for...

mixture produced is led into the column 3 where it reacts with nitric acid with isotope exchange. The  $\text{HNO}_3$  from column 6 enters the reactor 9 (which is analogous to the reactor 10). The nitric oxide from the reactors is brought back to the column 6 and reaches finally the lower part of the first column. The  $\text{NO}$  free of  $\text{N}^{15}$  is discharged from the cascade; the  $\text{H}_2\text{SO}_4$  formed in the reactors is led off to the reservoir. The  $\text{HNO}_3$  enriched in  $\text{N}^{15}$  is led away from the lower part of the second column through an electromagnetic dropper 8. Columns, valves, and connecting pieces are made of nonrusting steel of the type 1X19H9T (1Kh19N9T). The packing material is teflon. The reactors consist of quartz. The automatic regulation is related to the stabilization of the acid and water flows in the large and small reactor, to the stabilization of the quantity of the discharged product (acid), and the regulation of the gas addition. The regulating system consists of the automatic stabilizers, a signal block controlling the automatic regulators and stabilizers, and a feeding block. The whole regulating system is free from contacts in its working and must give an accurate and reliable performance over a period of

Card 3/4

22876

3/057/61/010/005/034/015  
B102/B214

An automatic cascade apparatus for...

operation. The enriched samples ( $N_2$  and NO) were subjected to a mass spectroscopic investigation which allowed the isotopic composition to be determined to an accuracy of  $\pm 0.02\%$ . Depending on the amount of nitrogen taken the concentrations are given by:

Nitrogen taken, g/day	$N^{15}$ concentration, %
0.55	99.8
0.69	64
0.84	50

X

The authors thank V. A. Vlasenko, R. V. Tishchenko, R. M. Sakandelidze, D. K. Puradashvili, G. L. Partsakhashvili, L. V. Yermakova, A. M. Gasparov, M. S. Mikhelashvili, L. I. Chernova, S. V. Bubnov, and I. A. Kuras for collaboration. There are 5 figures, 1 table, and 5 references: 2 Soviet-bloc and 3 non-Soviet-bloc.

SUBMITTED: June 7, 1960

Legend to Fig. 2: Specifications of length in mm; (4) outlet of the product.

(NOTE: Due to the size of the figure, we were unable to fit it to a master.)

Card 4/4

KILADZE, N. Z.

"The Multilayered Archaeological Monument "Sagvardzhile"  
Sov. shk. AN Gruz. SSR, Vol 14, No 9, 1953, pp 561-567

Describes the archaeological monument "Sagvardzhile," which is located between the rivers Dzevrula and Shavi-tskhali, and the layers found during excavation, which are as follows: 1. Five layers of the old stone age (Paleolithic), 2. a layer of the new stone age (Neolithic), 3. a layer from the beginning of the metal age (Eneolithic), and 4. a layer with relics of later periods. (RZhGeol, No 4, 1954)

*Acad. Sci Georgian SSR*

*Instit. of History em. I. A. Jibaraishvili*

SO: W-31187, 6 Mar 55

68566

001/35-59-11-8964

Translation from: Referativnyy zhurnal, *Astronomiya i Geodeziya*, 1959, Nr 11, pp 42 - 43 (USSR)

AUTHOR: Kiladze, R.I.

TITLE: On the Distribution of Masses in the Galaxy

PERIODICAL: Eyul. Abastumansk. astrofiz. observ., 1958, Nr 22, pp 125 - 137 (Engl.res.)

ABSTRACT: According to data on the rotation of the sub-system of long-period Cepheids and clouds of interstellar gas, the circular velocity  $V$  is obtained, as a function of the distance  $R$  from the center of the Galaxy. Two solutions of the value of  $R$  and  $V$  in the region of the sun are proposed: 1.)  $R_{\odot} = 7.2$  kpc.  $V_{\odot} = 234$  km/sec; 2.)  $R_{\odot} = 8.2$  kpc.  $V_{\odot} = 216$  km/sec. The distribution of masses is characterized by the function of the surface density of masses projected on the galactic plane,  $D(R)$ . For determining  $D(R)$  formulae are derived under the assumption of the flat disk, and spherical models, representing two extreme cases between which should be found a real distribution of masses. In order to use the formulae obtained, it is necessary to know  $V(R)$  up to  $R = \infty$ , because of which the function of  $V(R)$  is extra-

Card 1/2

68566

APPROVED FOR RELEASE: 06/13/2000  
On the Distribution of Masses in the Galaxy

CIA-RDP86-00513R000722520010-2"

polated to large  $R$ 's. The found numerical values are cited and the curves of  $D(R)$  for both versions of  $R_{\odot} - V_{\odot}$  and both models are presented. The author stresses the quick fall of  $D(R)$  with  $R$  and the break of the curves of  $D(R)$ , when  $R \approx R_{\odot}$ ; the same is noticed during stellar-statistical surveys. Considering the lesser value of  $D(R_{\odot})$  obtained for the second version of  $R_{\odot}, V_{\odot}$ , as more probable, the author gives his preference to this version. Bibl. 5 titles.

G.S. Ruzmin

Card 2/2

KILADZE, R.I.

Determining radial velocities of stars at the Abastumani Astrophysical  
Observatory. Astron. tsir. no.199:15-17 Ja '59.

(MIRA 13:2)

1. Abastumanskaya astronomicheskaya observatoriya.  
(Stars--Motion in line of sight)

KILADZE, R.I.

Radial velocities of stars of early spectral classes. Astron. tsir.  
no.205:12-13 0 '59. (MIRA 13:6)

1. Abastumanskaya astrofizicheskaya observatoriya, gora Kanobil'.  
(Stars--Motion in line of sight)

KILADZE, R. I., Cand Phys-Math Sci -- (diss) "Determination of the ray velocities of stars with the aid of a 72-cm objective prism mounted in front of a 70-cm meniscus telescope." Tbilisi, Academy of Sciences Georgian SSR Publishing House, 1960. 8 pp; (Academy of Sciences USSR, Main Astronomical Observatory); 150 copies; free; (KL, 22-60, 130)

YERFYLEV, N.P., kand. fiz.-matem. nauk; KILADZE, R.I., kand. fiz.-  
matem. nauk; RUSKOL, Ye.L., kand. fiz.-matem. nauk;  
KULIKOVSKIY, P.G., kand. fiz.-matem. nauk

Plenums of the Astronomical Council and its committees. Vest.  
AN SSSR 34 no.5:134-137 My '64. (MIRA 17:6)

KILADZE, R.I.

A class of orbits in the restricted problem of three bodies. *Bull.*  
*Abast. astrofiz. obser.* 32:209-221 '65.

Axial rotation of planets. *Ibid.*:223-230

Rotation of planets on their axis. *Ibid.*:231-234 (MIRA 18:10)

ACC. NR: AR6020775

SOURCE CODE: UR/0269/66/000/003/0082/0083

AUTHOR: Kiladze, R. I.

TITLE: A class of orbits in the bounded problem of three bodies

SOURCE: Ref. zh. Astronomiya, Abs. 3.51.684

REF SOURCE: Byul. Abastumansk, astrofiz. observ., no.32, 1965, 209-221

TOPIC TAGS: orbit calculation, numeric integration, planetary orbit, asteroid

ABSTRACT: The motion of an infinitesimal mass along orbits nearly similar to the orbit of a less massive body (planet) with a mass  $\mu$  was studied according to the method of the bounded circular problem of three bodies. The summary mass of the system was taken as 1 newton and it was considered that  $\mu \ll 1$ . The solution for the time intervals during which the particle was sufficiently distant from the planet was obtained by the trial and error method (up to the 5th approximation) by using linearized equations of motion. For the time intervals when the particle was sufficiently close to the planet, a numerical integration was made of strict equations of motion transformed so that it was possible to calculate directly the values of specific momentum of a particle with respect to the planet. The data obtained indicated the character of particle behavior with a growing  $\mu$  of initial conditions corresponding to the orbits of particles crossing the surface of the planet or passing near it. At increasing  $\mu$ , the feeding zone of the

Card 1/2

UDC: 523.12

ACC NR: AR6020775

planet (at sufficiently low  $\mu$ ) adjacent directly to the planet is separated into two parts departing from both sides of the planet's orbit until  $\mu$  no longer attains the value of  $1/1500$ . The width of the feeding zone is one-third the radius of the planet's orbit. It is possible, with a sufficiently rapid growth of  $\mu$ , that the particles vibrating around the liberation point  $L_1$  and  $L_2$  are left in the space between the separated parts of the feeding zone. This can explain, for instance, the existence of the Trojan asteroids. During further growth of  $\mu$  up to  $1/400$ , both parts of the feeding zone begin to converge up to the merging in the vicinity of liberation point  $L_3$ . It is stressed that the conclusions obtained should be valid also for the case of orbits generated by elliptic orbits with small eccentrics. The data on the calculation of several quasicircular orbits at  $\mu = 0.001$  are given in the conclusion. Bibliography of 5 titles. B. Gel'fgat. [Translation of abstract]

SUB CODE: 22,03

Card 2/2

KILADZE, R.M.

Reducing the wave height in the channel by a lateral spillway.  
Soob.AN Gruz.SSR 18 no.6:655-662 Je '57. (MIRA 10:10)

1. Tbilisskiy nauchno-issledovatel'skiy institut soorusheniy i  
gidroenergetiki "THISONI." Predstavleno akademikom K.S.Zavriyevym.  
(Spillways) (Waves)