

NOVIKOV, F.I., assistant; PUSTOVOY, G.T., student V kursa.

Effective method for preparing salep mucilage. Apt.delo 7 no.2:46-48  
Mr-Apr '58. (MIRA 11:4)

1. Iz kafedry tekhnologii lekarstv i galenovykh preparatov (zav.-  
doks. A.S. Prozorovskiy) Moskovskogo farmatsevticheskogo instituta.  
(MUCILAGE)

NOVIKOV, F.I.; PROZOROVSKIY, A.S.

Fillers for the dilution of dry extracts. Apt.delo 8  
no.2:51-58 Mr-Ap '59. (MIRA 12:5)

Iz kafedry tekhnologii lekarstvennykh form i galenovykh  
preparatov (zav. - dots. A.S.Prozorovskiy) Moskovskogo  
farmatsevticheskogo instituta.  
(EXTRACTS) (DEXTRINE)

NOVIKOV, F.I.; PROZOROVSKIY, A.S.

Quantitative determination of the sum total of alkaloids in the rhizome of *Scopolia caucasica* and in its extracts. Apt. delo 9 no. 4:16-19 JI-Ag '60. (MIRA 13:8)

1. Kafedra tekhnologii lekarstv i galenovykh preparatov (zav. - dotsent A.S. Prozorovskiy) I Moskovskogo ordena Lenina meditsinskogo instituta im. I.M. Sechenova.  
(ALKALOIDS)

NOVIKOV, F.I.

Investigation of extraction of juice from the rhizome of *Stopolia caucasia* by means of pressing the wetted material. Apt. delo 9 no.6: 9-12 N-D '60. (MIRA 13:12)

1. Kafedra tekhnologii lekarstv i galenovykh preparatov (zav. - dotsent A.S. Prozorovskiy) I Moskovskogo ordena Lenina meditskogo instituta imeni I.M. Sechenova.  
(ALKALOIDS)

NOVIKOV, F.I.

Studies of the extraction of Scopolia rhizome by means of pressing  
wet material. Report No.2. Apt. delo 10.no.4:17-22 JI-Ag '61.  
(MIRA 14:12)

1. Farmatsevticheskiy fakul'tet I Moskovskogo ordena Lenina meditsin-  
skogo instituta.

(ALKALOIDS)

"APPROVED FOR RELEASE: 07/19/2001

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CIA-RDP86-00513R001137420017-5"

1.1.

Study on the... the... the...  
the... the... the...  
My... 164.

1. ...  
... Secret...

111-111-111  
AUTHOR: Novikov, F.L., (Trust Manager)

11-2-24-27

TITLE: Letter to the Editor

PERIODICAL: Promyshlennaya Energetika. 1958. Vol.13. No.2. pp.36

ABSTRACT: The Energonaladka Trust of the Moscow Regional Council of National Economy announce the first part of "An Album of Typical Circuits for Water Purification for Small and Medium Boiler Houses", which gives advice about water treatment for industrial boilers and will be published in the first quarter of 1958.

ASSOCIATION: Energonaladka

AVAILABLE: Library of Congress

1. Water softeners
2. Boiler compounds

Card 1/1



NOVIKOV, F. S.

Briquets (Fuel)

Strength and density of briquets. Ugol' 27, No. 3, (312) 1952.

9. Monthly List of Russian Accessions, Library of Congress, \_\_\_\_\_ May \_\_\_\_\_ 195<sup>2</sup><sub>6</sub>, Incl.

NOVIKOV, F.S. . . dotsent. kand.tekhn.nauk

Estimating coal briquetting properties. Nuach.trudy MGI no.17:181-192  
'56. (MIRA 10:11)

(Coal--Testing) (Briquets (Fuel))

NOVINOV, F. .

Cand. Tech. Sci.

Dissertation: "Analysis of the methods for film projecting with optical alignment and continuous motion of a film." 17, 6/6.

Moscow Inst. of Engineers of Geodesy, Aerial Photography and Cartography,  
Ministry of Air Defense, U.S.S.R.

SC 100 1000000  
Sum 71

NOVIKOV, I.I.; NOVIK, F.S.

X-ray methods of studying the effect of the rate of cooling  
on dendritic segregation. Zav.lab. 25 no.10:1195-1198 '59.  
(MIRA 13:1)

1. Institut savetnykh metallov im. M.I.Kalinina.  
(X rays--Industrial applications)  
(Metallography)

NOVIKOV, I.I., prof.; NOVIK, F.S.

Effect of the rate of tension on the plasticity of aluminum alloys in the solid-liquid state. Izv. vys. ucheb. zav.; tsvet. met. 8 no.4:130-133 '65. (MIRA 18:9)

1. Kafedra metallovedeniya tsvetnykh, redkikh i radioaktivnykh metallov Moskovskogo instituta stal' i splavov.

NOVIKOV, Fedor Sergeyevich

[Kinematic analysis of hinge and lever mechanisms] Kine-  
maticheskii analiz sharniro-rychazhnykh mekhanizmov; uchebno-  
metodicheskoe posobie dlia studentov-zaochnikov. Moskva,  
Mosk. gornyi in-t im. I.V.Stalina, 1961. 43 p.

(Mechanisms)

(MIRA 16:7)

BAKALOV, S.A.; BELOUSOV, V.F.; BRATSEV, L.A.; VODOLAZKIN, V.M.;  
YEROSHENKO, V.N.; ZHUKOV, V.F.; LUBAN, S.A.; MARKIZOV, L.P.;  
NADEZHGIN, A.V.; NOVIKOV, F.Ya.; PONOMAREV, V.D.; POTRASHEV,  
G.D.; ROZHDESTVENSKIY, S.I.; TROFIMOV, S.V.; FEL'DMAN, I. .;  
FOYGEL', D.O.; KHRUSTALEV, L.N.; CHURUKSAYEV, I.I.;  
KONDRAT'YEVA, V.I., red.

[Theory and practice in the study of frozen ground in construc-  
tion] Teoriia i praktika razrobovdeniia v stroitel'stve. Mo-  
skva, Nauka, 1965. 187 p. (MIRA 18:4)

1. Moscow. Nauchno-issledovatel'skiy institut osnovaniy i pod-  
zemnykh sooruzheniy. Severnoye otdeleniye.

NOVIKOV, Fedor Yakovlevich; ZHUKOV, V.F., otv.red.; GRIGOR'YEV,  
Ya.M., red.izd-va; GUSEVA, A.P., tekhn.red.

[Frozen rock temperatures behind mine shaft lining] Tempera-  
turnyi rezhim merzlykh gornyykh porod za krep'iu shakhtnykh  
stvolov. Moskva, Izd-vo Akad.nauk SSSR, 1959. 98 p.

(MIRA 12:9)

(Shaft sinking)

(Frozen ground)



NOVIKOV, F.Ya., kand.tekhn.nauk

Shaft sinking in frozen depositions in summer. Shakht.stroi.  
no.2:23-26 Ag '59. (MIRA 12:11)

1. Severnoye otdeleniye Instituta merzlotovedeniya AN SSSR.  
(Shaft sinking) (Frozen ground)

NOVIKOV, P.Ya.

Temperature conditions of ground under burnt rock: ...

Trudy "GIL" no.1: 1967 '68.

(Frozen ground)

(Voronezh region--to bustle, ...)

NOVIKOV, F. Ya. (Vorkuta)

Causes of mine shaft deformation in northern areas. Izv.

AN SSSR. Otd. tekhn. nauk Met. i topl. no.2:155-162 Mr-A7

'61.

(MIRA 14:4)

(Pechora Basin--Shaft sinking)

(Frozen ground)

NOVIKOV, F.Ya.

Gradual thawing of frozen ground at the base of waste piles and round  
buildings. Trudy SOIM no.2:41-50 '62. (MIRA 17:1)

KOZ'YAKOV, Yu.; NOVIKOV, G.

The council of a club. Kryl. rod. 15 no.6:14-15 Je'64.  
(MIRA 17:6)

1. Chleny soveta Chebokarskogo aviatsionno-sportivnogo kluba.

GUSEV, A.D.; NOVIKOV, G.A.

Universal machine for finishing panel elements of furniture.  
Bum. i der. prom. no.1:35-37 Ja-Mr '63. (MIRA 16:7)

(Wood finishing)

NOVIKOV, Grigoriy Andreyevich; IYEVLEVA, T.A., red.; DONSKAYA, G.D.,  
tekh.red.

[Booklet for blasters] Pamiatka vzryvniku. Moskva, Nauchno-  
tekhn.izd-vo M-va avtomobil'nogo transp. i shosseinykh dorog  
RSFSR, 1960. 74 p. (MIRA 13:6)  
(Blasting)

NOVIKOV, Grigoriy Andreyevich; DEBERDEYEV, B.S. , red.; DONSKAYA,  
G.D., tekhn. red.

[Handbook for hitched grader and elevator grader operators]  
Pamiatka mashinistam pritsepnykh greiderov i greider-  
elevatorov. Moskva, Avtotransizdat, 1962. 44 p.  
(MIRA 15:7)

(Graders (Earthmoving machinery))



GUSEV, A.D.; NOVIKOV, G.A.

New lines for finishing panel sections of furniture. Bum. 1 der. prom.  
no.2:15-18 Ap-Je '63. (MIRA 17:2)

NOVIKOV, G.A.; ZUBOK, P.M., kand. sel'skokhozyaystvennykh nauk

Basic improvement of meadows on valley slopes. Zemledelie 8 no.10:45-  
48 0 '60. (MIRA 13:10)

1. Institut melioratsii Akademii sel'skokhozyaystvennykh nauk  
BSSR. 2. Predsedatel' kolchoza "Gigant", Tolochinskogo rayona,  
Vitebskoy oblasti (for Novikov).  
(White Russia--Pastures and meadows)

LIVSHITS, Boris Samoylovich; NOVIKOV, Georgiy Arsen'yevich; FARAFONOV,  
Leonid Stepanovich; GOLUBTSOV, I.Ye., otv.red.; LUZHETSKIY,  
N.N., red.; MARKOCH, K.G., tekhn.red.

[Rural automatic telephone stations] Sel'skie avtomaticheskie  
telefonnye stantsii. Moskva, Gos.izd-vo lit-ry po voprosam  
svyazi i radio, 1958. 195 p. (MIRA 13:7)  
(Telephone, Automatic)

NOVIKOV, G.A., inzh.; OPOL'SKAYA, Ye.K.

Crossbar branch office with a capacity of 100 numbers. Vest.  
svyazi 18 no.1:4-5 Ja '58. (MIRA 11:1)

1. Nachal'nik laboratorii Nauchno-issledovatel'skogo instituta  
tekhnologii svarki (for Novikov). 2. Starshiy inzhener konstruktorskogo  
byuro zavoda "Krasnaya zarya."  
(Telephone stations)

NOVIKOV, G. A.

**В. В. Штерн**

Защитные АТС на 10 номеров с автоматическим  
выбором номера

**Г. А. Косов**

Ручной автоматический телефонный аппарат  
с автоматическим выбором номера АТС

**О. Н. Косов**

Автоматический аппарат для приема и передачи  
с автоматическим выбором номера АТС

**В. В. Косов**

Многоканальный автоматический аппарат  
для выбора номера АТС

**В. А. Гусев**

**В. С. Косов**

Автоматический аппарат для приема и передачи  
с автоматическим выбором номера АТС

9 часов

(с 10 до 22 часов)

**В. А. Гусев**

Автоматический аппарат для приема и передачи  
с автоматическим выбором номера АТС

10

**Г. В. Косов**

1) автоматический аппарат для приема и передачи  
с автоматическим выбором номера АТС

**Г. В. Косов**

Автоматический аппарат для приема и передачи  
с автоматическим выбором номера АТС

10 часов

(с 10 до 16 часов)

✓ В. В. Косов *Видеосъемка работы аппарата АТС*

Автоматический аппарат для приема и передачи  
с автоматическим выбором номера АТС

**С. С. Косов**

Автоматический аппарат для приема и передачи  
с автоматическим выбором номера АТС

**А. В. Косов**

Автоматический аппарат для приема и передачи  
с автоматическим выбором номера АТС

**А. В. Косов**

Автоматический аппарат для приема и передачи  
с автоматическим выбором номера АТС

11

report submitted for the Centennial Meeting of the Scientific Technological Society of  
Radio Engineering and Electrical Communications in A. S. Popov (1859-1944), Moscow,  
8-10 June, 1959

NOVIKOV, G. A.

25765 NOVIKOV, G. A. Rol' mlekop-itayushchikh i ptits v zhizni elovykh  
Lesov Laplandii. Botan. zhurnal, 1948, No. 1 s. 88-89. Bibliogr: s. 8.

SOL Letopis' Zhurnal Statey, No. 30, Moscow, 1948.

Translation: The Role of Mammals and Birds in the Life of Spruce Forests in  
Lapland.

Chair of Vertebrate Zoology, Leningrad State U.

NOVIKOV, G. A.

PA 25/49T57

USSR/Medicine -- Environment  
Medicine -- Climate

Dec 48

"Review of N. P. Lavrov's Book, 'Acclimatization and Reacclimatization of Fur-Bearing Animals in the USSR,'" G. A. Novikov, 1 p

"Priroda" No 12

In addition to changing the general character of land in the USSR, the Five-Year Plan intends a socialist reconstruction of the animal world. Book is not well-organized, but presents general picture of what is going to happen due to the changes being made. Moscow, 1946, 219 pp, five maps.

25/49T57

PAS/49170

NOVIKOV, G. A.

USSR/Medicine - Environment  
Medicine - Botany

May/Jun 48

"Study of Forests and the Ecology of Mammals and  
Birds," G. A. Novikov, 4 3/4 pp

"Iz v-s Geog Obshch" Vol LXXX, No 3

Generally surveys books treating forestry from an  
ecological standpoint.

5/49T98



NOVIKOV, G. A.

30254

Sutochnaya zhizn' lyesnykh ptits v Subarktikye. Zool. zhurnal, 1949, vyp. 1,  
s. 461-70.--Bibliogr: 14 nazv.

SO: LETOPIS' NO. 34

NOVIKOV, G.A.

Ecology of birds of the Khibiny Mountains (Kola Peninsula)  
Trudy Zool. inst. 9 no.4:1133-1154 '52. (MLRA 7:11)  
(Khibiny Mountains--Birds) (Birds--Khibiny Mountains)

NOVIKOV, G.A.

Materials on the feeding habits of forest birds of the Kola Peninsula. Trudy Zool. inst. 9 no.4:1155-1198 '52. (MLBA 7:11)  
(Kola Peninsula--Birds) (Birds--Kola Peninsula)

KOVYKOV, G. A.

Kola Peninsula - Forest Ecology

Primeval Forests of the Kola Peninsula. *Trudy Vsesoyuznogo nauchnogo tsentra po izucheniyu Severnogo Kavkaza*.  
geog. otsech. 14, no. 1, 1971.

Monthly List of Russian Accessions. Library of Congress. October 1971. 10 p.

NOVICHKOV, G. A.

Dissertation: "The Ecology of Mammals and Birds of the Forest Steppe Complexes." Dr Biol Sci, Inst of Zoology, Acad Sci USSR, Moscow, Oct-Dec 53. (Vestnik Akademii Nauk, Moscow, Jun 54) (Source gives brief summary of work)

SO: SOU 318, 23 Dec 1954

NOVIKOV, G.A.

[Field studies on the ecology of terrestrial vertebrates] Polevye  
issledovaniia po ekologii nazemnykh pozvonochnykh. Izd.2., ispr.1 dop.  
Moskva, Sovetskaia nauka, 1953. 501 p. (MLRA 7:6)  
(Vertebrates--Ecology)

NOVIKOV, G.A.

PAVLOVSKIY, Ye.M., akademik, redaktor; VINOGRADOV, B.S., redaktor;  
ARNOL'DI, L.V.; BEY-BIYENKO, G.Ya.; BORKHSENIUS, N.S.; VINOGRADOV, B.S.;  
GUTSEVICH, A.V.; KIRICHENKO, A.N.; KIR'YANOVA, Ye.S.; KOZHANCHIKOV, I.V.;  
LEPNEVA, S.G.; LIKHAREV, I.M.; MALEVICH, I.I.; NOVIKOV, G.A.; POPOV, V.V.;  
POPOVA, A.N.; SOCHAVA, V.B.; STARK, V.M.; TERENT'YEV, P.V.; KHARITONOV,  
D.Ye.; CHERNOV, V.B.; SHAPOSHNIKOV, G.Kh.; SHTAKEL'BERG, A.A.; YUDIN, K.A.

[Animal life of the U.S.S.R.] Zhivotnyi mir SSSR. Vol.4 [Forest zone]  
Lesnaya zona. Moskva, Izd-vo Akademii nauk SSSR, 1953. 737 p. (MLRA 7:3)  
(Forest fauna) (Zoology)

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NOVIKOV, G.A.

History of the ecology of terrestrial vertebrates in Russia.  
Trudy Inst.ist.est.i tekhn. 16:146-200 '57. (MIRA 10:10)  
(Zoology--Ecology)

USSR / General Biology. Evolution.

B-6

Abs Jour: Ref Zhur-Biol., No 18, 1958, 51121.

Author : ~~Novikov, G. A.~~  
Inst : ~~Not given.~~  
Title : The Degree of Stenobiosis and Ecological Plasticity of the Higher Vertebrates.

Orig Pub: Vestn. Leningr. un-ty, 1957, No 21, 65-74.

Abstract: The mistake of simplified representations of stenobiosis - that is - the narrow environmental adaptability of higher animals - was indicated. Data were analyzed, which touch upon the specialization of mammals and birds in relation to the selection of the habitat, the character of food, the means in obtaining it, the building of burrows and nests. It seems that many species, considered to be stenobiotic, in reality,

Card 1/2

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NOVIKOV G.A.

"Zoological excursions" by B.E. Raikov and M.N. Rimskii-Korsakov.  
Reviewed by G.A. Novikov. Zoologicheskii zhurnal, 1955, no. 6, 955-956; 57  
(Zoology--Study and teaching) MLRA 1: B)  
(Rimskii-Korsakov, M.N.) (Raikov, B.E.)

NOVIKOV, G.A.

"Animal ecology" by N.P. Maunov. Reviewed by G.A. Novikov. Biol.  
MOIP. Otd. biol. 62 no. 2:93-99 Mr-Apr '57. (MLRA 10:8)  
(ZOOLOGY--ECOLOGY)

AKRAMOVSKIY, N.H., ARNOL'DI, L.V., BEI-BIYENKO, G.Ya., BORKHSENIUS, N.S.,  
VERESHCHAGIN, N.K., DAL', S.K., D'YAKONOV, A.M., KIRICHENKO, A.N.,  
KIR'YANOVA, Ye.S., KOZHANCHIKOV, I.V., KRYZHANOVSKIY, O.L.,  
LEPNEVA, S.G., LIKHAREV, I.M., LOGINOVA, M.M., NIKOL'SKAYA, M.N.,  
NOVIKOV, G.A., POPOV, V.V., PORTENKO, L.A., RYABOV, M.A., TER-MINASYAN,  
M.E., CHERNOV, S.A., SHTAKEL'BERG, A.A.; PAVLOVSKIY, Ye.N., akad.,  
glavnyy red., VINOGRADOV, B.S., [deceased], red.; KOZLOVA, G.I., red.  
izd-va.; PEVZNER, R.S., tekhn. red.

[Animals of the U.S.S.R.] Zhivotnyi mir SSSR. Moskva. Vol. 5. [Mountain  
provinces of European Russia] Gornye oblasti evropeiskoi chasti  
SSSR. 1958. 655 p. (MIRA 11:11)

1. Akademiya nauk SSSR. Zoologicheskiy institut.  
(Zoology)

NOVIKOV, G.A., doktor biol.nauk

From the history of the theory of evolution. Trudy Inst. 1st. est.  
1 tokh. 24:21-31 '58. (MIRA 11:8)  
(Cotta, Heinrich Von, 1763-1844) (Forest ecology)

NOVIKOV, Georgiy Aleksandrovich; MAL'CHEVSKIY, A.S., doktor biolog.nauk,  
otv.red.; PETROVICHEVA, O.L., red.; VODOLAGINA, S.D., tekhn.red.

[Ecology of mammals and birds inhabiting oak forests of the  
forest-steppe zone] Ekologiya zveri i ptits lesostepnykh dubrav.  
Leningrad, Izd-vo Leningr.univ., 1959. 350 p. (MIRA 12:12)  
(Forest fauna) (Zoology--Ecology)

MAL'NEVSKIY, Aleksey Sergeyevich; NOVIKOV, G.A., prof., otv.red.;  
PETROVICHEVA, O.L., red.; VODOLAGINA, S.D., tekhn.red.

[Nest life of song birds; reproduction and postembryonic  
development of passeriformes of European Russia] Gnezdovaya  
zhizn' pevchikh ptits; razmnozhenie i postembrional'noe  
razvitie lesnykh vorob'inykh ptits evropeiskoi chasti SSSR.  
[Leningrad] Izd-vo Leningr.univ., 1959. 280 p. (MIRA 12:3)  
(Passeriformes)



NOVIKOV, G.A.

Ernst Haeckel and animal ecology. Vest.LGU 14 no.3:57-71  
'59. (MIRA 12:5)  
(HAECKEL, ERNST, 1834-1919) (ZOOLOGY--ECOLOGY)

KOVIKOV, G.A.

Vsevolod Borisovich Dubinin; obituary. Biul. MOIP. Otd. biol. 84  
no.2:135-146 Apr '59. (MIRA 12:10)  
(Dubinin, Vsevolod Borisovich, 1913-1958)

NOVIKOV, G. A. (USSR)

"The use of tracking method in investigating the ecology of mammals in Russia."

report presented at the Intl. Symposium on Methods of Theriological Investigation. Brno, Czech.,  
1 Sept. 1960

POPOV, V.A.; NOVIEDV, G.A., prof., otv.red.

[Mammals of the Volga-Kama area; insectivores, chiropterans,  
rodents] Mlekopitaiushchie Volzhsko-Kamskogo kraia; nase-  
komiadnye, rukokrylye, gryzuny. Kazan', Akad.nauk SSSR,  
Kazanskii filial, 1960. 467 p. (MIRA 14:12)  
(Kama Valley--Mammals)  
(Volga Valley--Mammals)

NOVIKOV, G.A.

Changes in the species stereotype of bird nesting under the conditions of cultivated landscape. Zool. zhur. 43 no.8:1193-1202

'64.

(MIRA 1964)

1. Laboratoriya ekologii pozvonochnykh biologicheskogo instituta Leningradskogo gosudarstvennogo universiteta.

NOVIKOV, G.A.

"Guide to the study of animal footprints" by A.N. Formozov.

Reviewed by G.A. Novikov. Zool. zhur. 39 no. 2: 311-312

F '60.

(MIRA 13:6)

(Zoology--field work)

(Formozov, A.N.)

NOVIKOV, G.A.

Geographical variability of the density of forest bird populations  
in the European part of the U.S.S.R. and adjacent countries.  
Zool.zhur. 39 no. 3:433-447 '60. (MIRA 13:6)

1. Chair of Vertebrate Zoology, Leningrad State University.  
(Birds--Geographical distribution)  
(Forest fauna)

NOVIKOV, G.A. --

"Fundamentals of ecology" by B.G. Ioganzen. Reviewed by G.A. Novikov.  
Zool. zhur. 39 no.8:1270-1276 Aug '60. (MIRA 13:8)  
(Ecology) (Ioganzen, B.G.)



GROMOV, I.M.; GUREYEV, A.A.; NOVIKOV, G.A.; SOKOLOV, I.I.; STRELKOV,  
P.P.; CHAPSKIY, K.K.; PAVLOVSKIY, Ye.N., akademik, glav.  
red.; BYKHOVSKIY, B.Ye., red.; MONCHALSKIY, A.S., red.;  
SKARLATO, G.A., red.; SHTAKEL'BERG, A.A., red.; SMIRNOVA,  
N.V., red.; SMIRNOVA, A.V., tekhn. red.

[Mammals of the U.S.S.R.] Mlekopitaiushchie fauny SSSR.  
Sost. I.M.Gromov i dr. Moskva, Izd-vo AN SSSR. Pts.1-2. 1963.  
(MIRA 16:9)

1. Akademiya nauk SSSR. Zoologicheskii institut.  
(Mammals)

NOVIKOV, G.A.; MAL'CHEVSKIY, A.S.; OVCHINNIKOVA, N.P.; IVANOVA, N.S.

Birds of the "Les na Vorskle" [Forest on the Vorksla] and its  
surrounding area. Vop. ekol. i biotsen. no.8:9-118 '63.  
(MIRA 17:1)

NOVIKOV, G.A.

Mammalogy in the U.S.S.R. and abroad today. Zool. zhur. 42 no.1:  
78-91 '63. (MIRA 16:5)

1. Laboratory of Vertebrate Ecology, State University of Leningrad.  
(Mammals--Research)

NOVIKOV, G.A.; TIMOFEYEVA, Ye.K.

Food habits and silvicultural significance of roe deer in the  
forest-steppe oak-dominant woods. Biul.Moip.Otd.biol. 69  
no.2:39-53 Mr-Apr '64. (MIRA 17:4)

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001137420017-5

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001137420017-5"

DOVIL, S.A.

Biology of other species of the genus *Leptopoda* in the  
woods. Biol. Leningrad. Vol. 10, 1964, pp. 1-10.

NOVEMBER, 1964.

TABLE 1. MOBILE SOURCE EMISSIONS OF CO<sub>2</sub> IN THE U.S. (1990-2000)





ACC NR: AR6000452

SOURCE CODE: UR/0137/65/000/009/1060/1061

AUTHOR: Novikov, G. A.

TITLE: On the conditions under which the low carbon steel passes into the brittle state at low temperature

SOURCE: Ref. zh. Metallurgiya, Abs. 91385

REF SOURCE: Sb. Str-vo v r-nakh Vost. Sibiri i Krayn. Severa. No. 5. Krasnoyarsk, 1963, 168-172

TOPIC TAGS: steel, low carbon steel, stress analysis, brittleness, steel

ABSTRACT: An investigation has been conducted on the influence of temperature, the coefficient of stress concentration  $K_{sc}$ , and the coefficient of stress dynamicity  $K_d$  on imparting brittleness to steel St 3 kp. ( $\sigma_B = 37 \text{ kg/mm}^2$ ,  $\sigma_B = 41 \text{ kg/mm}^2$ ,  $\sigma_B = 49 \text{ kg/mm}^2$ ,  $\psi = 59\%$ ,  $a_k = 8.8 \text{ kg/cm}^2$ ).  $K_{sc}$  was determined as the relation between work done in producing static failure in a smooth and in a grooved specimen. It was determined that the sharper grooves lower the work, causing static failure in the range of  $-40$  to  $-100^\circ\text{C}$ . At temperatures below  $-100^\circ\text{C}$  the temperature-imparted brittleness has a greater influence on the strength of material than does that of the stress concentrators.  $K_d$  was determined as a relation between static strength and impact strength.

Card 1/2

UDC: 669.14.018.265

4/102-00

ACC NR: AR6000452

In the case of smooth specimens, the dynamic loading becomes dangerous only at a temperature below  $-110^{\circ}\text{C}$ . When stress concentrators are present,  $K_d$  increases at higher temperatures. It will be necessary to conduct special investigations for the purpose of compiling design tables of  $K_{sc}$  for details, working at low temperatures.  
V. Olenicheva [Translated from abstract]

SUB CODE: 11

Card

2/2

ACC NR: AR6014356

AV

DATE: 0277/0011/0011/0011

AUTHOR: Novikov, G. A.

TITLE: On the conditions at which low-carbon steel passes into the brittle state during lowering of temperature

SOURCE: Ref. zh. Mashinostroitel'nyye materialy, konstruktiv i raschet detalей mashin. Gidroprivod, Abs. 11.48.87

REF SOURCE: Sb. Str-vo v r-nakh Vost. Sibiri i Krayn. Severa. No. 5. Krasnoyarsk, 1963, 168-172

TOPIC TAGS: low carbon steel, brittleness, steel, impact strength, *low temperature*, *stress concentration*

ABSTRACT: The simultaneous influence of low temperature, stress concentration, and dynamic loading on the impact strength of steel st. 3 kp. were investigated. The temperature range was -20 to -140C, stresses were concentrated at a 2-mm deep groove, and dynamic loading was tested on an impact machine MK-30. It is noted that cold brittleness as a physical property appears under working conditions only in the case of coexistence of low temperature, the presence of stress concentrators, and dynamic loading. The presence of one or two of these conditions does not produce a brittle failure of the material until brittleness is induced by the influence of temperature. 7 illustrations. Bibliography of 2 titles. [Translation of abstract]

SUB CODE: 11

UDC: 669.14.018:539.55

Card 1/1

ЭЛЕКТРИЧЕСКИЕ ТРАНСФОРМАТОРЫ.

Electric Transformers

Determination of resoldering in a core-type current transformer. Izv. energ. no. 9, 1952.

9. Monthly List of Russian Accessions. Library of Congress, December 195<sup>2</sup>, Incl.



1. HAY, G.F.

Some remarks on the interpretation of complex diagrams in the study of complex systems in the field of biology. Biol. J. Linn. Soc. 1963.

NOVIKOV, Grigoriy Fedorovich; KAFKOV, Yuriy Nikolayevich;  
IVANOV, N.A., retsenzent; BERDYUKOVA, A.S., retsenzent;  
GORBUSHINA, L.V., retsenzent; ZIMIN, L.F., retsenzent;  
TAFEYEV, G.F., nauchn. red.; TAYBASHEVA, A.N., ved. red.

[radioactive methods of prospecting] Radioaktivnye metody  
razvedki. Leningrad, Nedra, 1965. 758 p. (MIRA 19:1)

ACC NR: AM6008492

Monograph

GR/

Novikov, Grigoriy Fedorovich; Kapkov, Yuriy Nikolayevich

Radioactive methods of prospecting (Radioaktivnyye metody razvedki) Leningrad, Izd-vo "Nedra", 65. 0758 p. illus., biblio. Textbook for students of higher educational institutions studying in the speciality of "Geophysical methods of prospecting deposits of minerals". 3,500 copies printed.

TOPIC TAGS: geologic survey, prospecting, radiometry, gamma radiation, irradiated gas

PURPOSE AND COVERAGE: This book presents the physical and geological bases of radioactive methods, working principles, a description of radiometric apparatus and methods of laboratory radiometric analysis of radioactive ore. It also gives methods of surveying and prospecting deposits of radioactive elements and other minerals paragenitically combined with radioactive elements: aerial gamma surveying, gamma surveying by automobile, gamma surveying on foot, emission surveying, lithogeochemical surveying, methods of studying radioactivity of water, gamma core sampling from bore holes, and radiometric sampling of ore taken from beds. For each of the above methods views are shown of the fields of application, theoretical principles, methods of work, laboratory processing of materials and geological interpretation of the results. This book is recommended for geophysics students in mining and geological survey institutes and universities with courses on "Radioactive methods of survey" and "Radiometry". It can also be useful to geophysicists and geologists in their practical work.

Card 1/3

2101: NONE



ACC NR: AM6008492

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   Ch. 3. Radiometric apparatus and methods of measuring radiation--141  
   Ch. 4. Radioactive elements in nature--247  
   Ch. 5. Radiometric analysis of samples--272  
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   Sect. I. Methods of surveying radioactive ores by gamma radiation  
     Ch. 6. Theoretical principles of gamma methods--346  
     Ch. 7. Aerial gamma surveying--385  
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Bibliography--745

SUB CODE: 20, 08 SUBM DATE: 04 Nov 65/ ORIG REF: 230/ OTH REF: 059

Card 3/3

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ACC NR: AR6019472 SOURCE CODE: UR/0209/66/000/002/0037/0037 70  
B

AUTHOR: Novikov, G. G.

TITLE: Dispersion of magnetohydrodynamic and magnetosonic waves in an ideal medium

SOURCE: Ref. zh. Astronomiya, Abs. 2.1.312

REF SOURCE: Dokl. AN TadzhSSR, v. 1, no. 11, 1964, 10-14

TOPIC TAGS: plasma physics, sound wave, magnetohydrodynamics, ~~dispersion~~, wave propagation, ~~ideal plasma~~

ABSTRACT: <sup>plasma</sup> The effect of electron inertia on the propagation of waves in plasma is examined. It has been established that electron inertia leads to the dispersion of magnetohydrodynamic and accelerated magnetosonic waves even in a theoretically ideal plasma. The effect was observed in the short-wave range. Bibliography of 13 titles. I. K. [KP]  
[Translation of abstract]

SUB CODE: 20/ SUBM DATE: none

Card 1/1/1111

UDC: 523.533.9

ELISHCHIKOV, Mikhail Il'ich, kand. tekhn. nauk, dots.; YEFIMOV, Boris Yefimovich, kand. tekhn. nauk, dots.; SPILINNIKOV, Pavel Stepanovich, inzh.; LITVINENKO, N.A., inzh., retsenzent; KAVIRIN, G.G., predstavitel', retsenzent; GAVRILOV, I.I., red.

[Use and repair of logging roads] Rasprostraneniye i remont lesvoznykh dorog. Izd. 2., perer. Moskva, Izd-vo "Lesnaya promyshlennost'", 1974. 40. s.

.. Alatyrskiy lesotekhnicheskiy tekhnicheskii tsentr

NOVIKOV, G.I.; SERGEYEV, H.S.; YANOVA, N.N.; IVANOVA, Ye.I.;  
SHESTAKOVA, S.I.

Conditions of the genesis and development of air-mass thunder-  
storms in the region of the Shosseynaya Meteorological Station.  
Sbor. rab. po sinop. no.5:87-91 '60. (MIRA 14:8)

1. Meteostantsiya Shosseynaya.  
(Shosseynaya region--Thunderstorms)

- [illegible]

BREMER, G.I., doktor tekhn.nauk, prof.; GARDIN, M.V., inzh.; DEMIN, A.V.,  
kand.tekhn.nauk; ZYABLOV, V.A., kand.tekhn.nauk; KAPLUNOV, M.M.,  
inzh.; KASHEKOV, L.Ya., inzh.; KOROLEV, V.F., kand.tekhn.nauk;  
KHASHNOV, V.S.; KULIK, M.Ye., kand.tekhn.nauk; MAKAROV, A.P., inzh.;  
NOVIKOV, G.I., kand.tekhn.nauk; NOSKOV, B.G., inzh.; OLENEV, V.A.,  
kand.vet.nauk; OSTANKOV, V.P., inzh.; PERCHIKHIN, A., inzh.;  
POKHVALENSKIY, V.P., kand.tekhn.nauk; SERAFIMOVICH, L.P., kand.  
tekhn.nauk; SMIRNOV, V.I., kand.tekhn.nauk; URVACHEV, P.N., kand.  
tekhn.nauk; FADEYEV, N.N., inzh.; FATEYEV, Ye.M.; KRYUKOV, V.L.,  
red.; VESKOVA, Ye.I., tekhn.red.

[Reference book on the mechanization of stock farming] Spravochnaya  
kniga po mekhanizatsii zhivotnovodstva. Moskva, Gos.izd-vo sel'khoz.  
lit-ry, 1957. 678 p. (MIRA 10:12)

1. Chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyaystvennykh  
nauk im. V.I.Lenina (for Krasnov, Fateyev).  
(Farm equipment) (Stock and stockbreeding)

PERCHIKHIN, Abram Vladimirovich, inzh.; KRASNOV, V.S.; KASHEKOV, L.Ya.,  
inzh.; NOVIKOV, G.I., kand.tekhn.nauk; MAKAROV, A.P., inzh.;  
GALDIN, M.V., inzh.; KOROLEV, V.P., kand.tekhn.nauk; FATEYEV,  
Ye.M., doktor tekhn.nauk; FADEYEV, N.N., inzh.; ROZIN, M.A.,  
red.; GUREVICH, M.M., tekhn.red.

[Mechanization of heavy work on livestock farms] Mekhanizatsiya  
trudozemnykh rabot na zhivotnovodcheskikh fermakh. Izd.4., ispr.  
1 dop. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1959. 447 p.

(MIRA 13:10)

1. Chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyaystven-  
nykh nauk imeni V.I.Lenina (for Krasnov).

(Stock and stockbreeding) (Farm mechanization)



KRASNOV, V.S.; KASHEKOV, L.Ya., kand. tekhn. nauk; NOVIKOV, G.I.,  
kand. tekhn. nauk; MAKAROV, A.P., kand. tekhn. nauk;  
GALDIN, M.V., inzh.; KOROLEV, V.F., kand. tekhn. nauk;  
PERCHIKHIN, A.V., inzh.; FADEYEV, N.N., inzh.; ROZIN,  
M.A., red.; DEYEVA, V.M., tekhn. red.

[Mechanization of production processes on livestock farms]  
Mekhanizatsiia proizvodstvennykh protsessov na zhivotno-  
vodcheskikh fermakh. Izd.5., ispr. i dop. Moskva, Sel'-  
khozizdat, 1963. 478 p. (MIRA 17:2)

1. Chlen-korrespondent Vsesoyuznoy akademii sel'skokho-  
zyaystvennykh nauk imeni V.I. Lenina (for Krasnov).

NOV 1966

5

✓ Thermodynamic processes in the reduction of iron chloride  
and iron bromide. G. I. Novikov, M. A. Orlovskaya, and  
S. A. Shchukarev. *Vysokaya Temperatura*, Leningrad, Gostizdat,  
1966, No. 155, Ser. Khim. Nauk, No. 11,  
16-21 (1966).—The equil. consts. were evaluated experi-  
mentally for the reduction by H of  $\text{FeCl}_3$  at 698, 746, and  
798°K. and of  $\text{FeBr}_3$  at 728, 796, and 820°K.—The free en-  
ergy, entropy, and enthalpy values were calcd. from the  
exptl. data and agreed well with accepted values. J. R. I.

(2) M

Jan

NOVIKOV, G. I.

Dissertation: "Thermodynamic Research on Wolfram Chloride." Cand Chem Sci, Leningrad State U, Leningrad 1953.

SO: Referativnyi Zhurnal, No. 5, Dec 1953, Moscow, AN USSR (W30928 ~~REDACTED~~)

NOVIKOV, G. I.

3

NOVIKOV, G. I.

### ISSUE

✓Gravimetric method for measuring the pressure of a saturated vapor. G. I. Novikov and S. A. Shelukarev. *Uchenye Zapiski, Kazansk. Universiteta, Fiz.-Mat. Nauki*, No. 163, Ser. Khim. Nauki, No. 12, 37-40 (1954). -- A static gravimetric method is described for the measurement of the pressure of a satd. vapor which is useful in the case of high-boiling and chemically active substances. The method was applied to the vapors of  $WCl_6$  over the temp. range 160-361°. The data appear to be a good continuation of those obtained by Vernon (*C.A.* 31, 82853) at low temps. The heat of vaporization was calcd. and found to be equal to 13.7 kcal./g. mole.

J. Roytar Leach

NOVIKOV, G.I.; CHAYKINA, N.I.

New method of extracting small amounts of lead from rocks and  
minerals. Inform.sbor.VSSEI no.2:78-79 '55. (MLRA 9:11)  
(Lead ores)

USSR.

2409. Method of analysis of tungsten chlorides. S. A. Shchurkayev, G. I. Novitsky and N. V. Anisimov. (Zashch. Lab., 1955, 82 (4): 401-403).—It is shown that  $WCl_6$  boiled with water, or heated in an atmosphere containing water vapour, is completely hydrolysed and can be determined from the amount of  $HCl$  produced. The material is placed in a crucible supported inside and near the closed end of an inverted test-tube. The open end of the test-tube stands in a beaker containing a standard alkali solution. An electric heater round the closed end is available for heating the crucible to  $150^\circ$  to  $200^\circ C$ . The top of the crucible carries a capillary tube partly filled with water. When the heater is switched on, the water is forced into the crucible by the expansion of air in the capillary. After being heated for 1 to 1.5 hr. the crucible is removed and ignited in a muffle-furnace to give the weight of  $WO_3$ . Any residue on the walls of the test-tube is washed into the alkali soln. and the chloride is determined. The method is suitable also for the lower chlorides of tungsten and for many other hydrolysable chlorides. The apparatus can be used to remove and determine ammonium chloride in ammoniacal solutions of  $WCl_6$ . G. S. SMITH

Leningrad State U.

Novikov, G. I.

Thermodynamic study of some chlorine derivatives of tungsten. I. Saturated vapor pressure of the hexachloride, and oxytetrachlorides of tungsten. S. A. Shchegolev and G. I. Novikov. Zhur. Neorg. Khim. 1, No. 3, 357-61 (1956). The vapor pressure of  $WCl_6$  increases from 43 mm. at  $215^\circ$  to 752 mm. at  $341^\circ$ ; of  $WOCl_4$  from 30 mm. at  $158^\circ$  to 755 mm. at  $223^\circ$ ; of  $WCl_4$  from 4 mm. at  $140^\circ$  to 760 mm. at  $280^\circ$ . The heat of vaporization (kcal.) for  $WCl_6$ ,  $WCl_4$ , and  $WOCl_4$  from solid and liquid phases are, resp., 14.0, 12.0; 16.7, 15.7; 18.0, 16.2; with an uncertainty of  $\pm 0.5$ . The corresponding entropies of vaporization (entropy units) are 24.2, 20.4; 30.3, 28.3; 38.0, 35.5; with an uncertainty of  $\pm 1.0$ . The m.p. and b.p. are, resp.,  $WCl_6$   $275^\circ$ ,  $348^\circ$ ;  $WCl_4$   $230^\circ$ ,  $296^\circ$ ;  $WOCl_4$   $204^\circ$ ,  $224^\circ$ . The uncertainty in the m.p. is  $\pm 10^\circ$ , in the b.p.  $\pm 2^\circ$ .  
C. H. Puchanan

2

100

em

SHCHUKAREV, S.A.; NOVIKOV, G.I.

Reduction of cerium trichloride by hydrogen. Zhur.neorg.khim.  
1 no.3:362-365 Mr '56. (MLRA 9:10)

(Cerium chlorides) (Reduction, Chemical)



Novikov, G. I.

7  
 The reduction of thorium tetrabromide with hydrogen.  
 B. A. Shechukayev, G. I. Novikov, and A. V. Suvorov.  
 Zhur. Neorg. Khim. 1, 1048-53 (1956). Reduction of  $\text{ThBr}_4$   
 with H at 300°, in the absence of moisture yields  $\text{ThBr}_3$ .  $\Delta H$   
 and  $\Delta S$  were computed for this and analogous reactions from  
 exptl. data derived from the dynamic and static methods.  
 reas. For  $\text{ThBr}_4(s) + 1/2\text{H}_2(g) = \text{ThBr}_3(s) + \text{HBr}(g)$   
 $\Delta H$  (kcal./mole) is  $2.7 \pm 0.3$  and  $2.1 \pm 0.4$ ;  $\Delta S$  (entropy  
 units) is  $-1.5 \pm 0.1$  and  $-3.1 \pm 0.7$ .  
 G. H. Hochman

3

RM mk

SECHILAREV, S.A.; NOVIKOV, G.I.; SUVOHOV, A.V.

Feasibility of applying the Lambert-Beer law to the study of  
gaseous systems in a wide temperature range. Report No.1.

Zhur. neorg. khim. 1 no. 11:2433-2439 N '56.  
(Gases--Spectra) (Vapors--Spectra)

(MLRA 10:5)

Novikov, G. I.

Distr: 4E3d

<sup>3393</sup> 19 19  
ALPHA DECAY OF Pu<sup>241</sup> L. N. Kudrat'ev, G. I. Novikov,  
 Ju. P. Bobolev, and L. L. Gol'din. Soviet Phys. JETP 4,  
 645-7 (1957) June.

In this work results are given of investigations on the  $\alpha$  spectrum of Pu<sup>241</sup> carried out with the help of an  $\alpha$  spectrometer. The  $\alpha$  spectra obtained are presented along with a level scheme for the U<sup>235</sup> nucleus. The parameters of the 4<sup>+</sup> level are given with precision; the first  $\alpha$  line corresponding to the transition to a 6<sup>+</sup> level is observed, and the parameters of this level measured; two weak lines are found which can be assigned to the  $\alpha$  decay of Pu<sup>241</sup>. A comparison of the experimental data with the theoretical formula of Landau is made for the intensities of the 6<sup>+</sup>, 2<sup>+</sup>, 4<sup>+</sup>, and 6<sup>+</sup> levels. (auth)

7  
 1-RM2

RM2

BASKOVA, Z.A.; NOVIKOV, G.I.

Isolation of small amounts of lead by means of the reducing roasting  
in vacuum [with summary in English]. Geokhimiia no.7:580-582 '57.  
(MIRA 11:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskii institut,  
Leningrad.

(Lead)

SOV, '78-3-12-7/36

AUTHORS: Shchukarev, S. A., Novikov, G. I., Suvorov, A. V., Bayev, A. K.

TITLE: Optical and Tensiometric Investigation of the Chlorides of Hexavalent Tungsten (Opticheskiye i tenzimetricheskiye issledovaniye khloroproizvodnykh shestivalentnogo vol'frama)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1958, Vol 3, Nr 12, pp 2630-2641 (USSR)

ABSTRACT: Several equilibria pertaining to the chlorine derivatives of hexavalent tungsten in the series  $WO_3$ - $WO_2Cl_2$ - $WOCl_4$ - $WCl_6$  were investigated. Optical and tensiometric methods were used in determining the products of the thermal decomposition. The starting materials were produced by chlorinating  $WO_3$  with  $CCl_4$ . At 310-330°C  $WO_2Cl_2$  is obtained in ratio to the  $WO_3$  and  $CCl_4$  of 1:2.  $WCl_6$  is produced at 290-300° and 80-100 atmospheres. The purity of the starting product was found to be satisfactory. The absorption spectra of the  $WCl_6$  and  $WOCl_4$  were measured

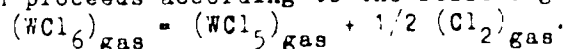
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over the interval 4000-8000 Å. The optical density of the vapor

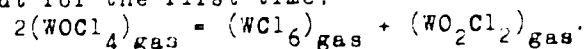
SOV/78-3-12-7/36

Optical and Tensiometric Investigation of the Chlorides of Hexavalent Tungsten

phase from the decomposition of the  $WCl_6$  was measured. The decomposition proceeds according to the following equation:



The absorption coefficient  $\epsilon_{WCl_6}$  was determined for the saturated vapor, and the average value was found to be  $0.46 \pm 0.05$ . From the tensiometric data the melting and boiling temperatures of the  $\beta$ -form of  $WCl_6$  could be calculated. Using the optical and tensiometric methods the thermodynamic investigation of the following disproportionation process was carried out for the first time:



From the optical and tensiometric data for the saturated vapors and using the linear relationship  $\lg P = f(1/T)$  and  $\lg D = f(1/T)$  it was found that the absorption coefficient  $\epsilon_{WOCl_4} =$

$0.028 \pm 0.3$ . The change in the free energy in this reaction is expressed in the following equation:  $\Delta F^0_{\text{solid}} = 15100 \text{ cal} -$

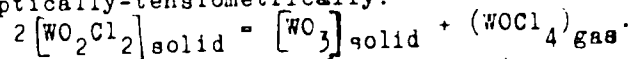
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$13,4 \text{ energy units} \cdot T$ . The following disproportionation

SOV/78-3-12-7/36

Optical and Tensiometric Investigation of the Chlorides of Hexavalent Tungsten

process of  $WO_2Cl_2$  was investigated thermodynamically and confirmed optically-tensiometrically:



The change in free energy in the process is expressed in the following equation:  $\Delta F_{solid}^0 = 29100 \text{ cal} - 42.9 \text{ cal/degree(en.ed.)}$

.T. The results show that the optical and tensiometric methods can be applied successfully to the determination of the partial composition of complicated gas systems. There are 11 figures, 8 tables, and 15 references, 6 of which are Soviet.

SUBMITTED: September 5, 1967

Card 3/3

SOV/78-3-12-8/36

AUTHORS: Shchukarev, S. A., Vasil'kova, I. V., Novikov, G. I.

TITLE: III. The Determination of the Heat of Formation of Chlorine Derivatives of Hexavalent Tungsten (III. Opredeleniye teplot obrazovaniya khlorproizvodnykh shestivalentnogo vol'frama)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1958, Vol 3, Nr 12, pp 2642-2646 (USSR)

ABSTRACT: The heat of solution of  $WOCl_4$ ,  $WO_2Cl_2$ , and  $WCl_6$  in 12% NaOH and at 25°C was determined. The production of the initial materials was carried out by chlorinating  $WO_3$  with  $CCl_4$  according to the following reactions:

$$WO_3 + CCl_4 = WO_2Cl_2 + COCl_2$$

$$WO_3 + 2CCl_4 = WOCl_4 + 2COCl_2$$

$$WO_3 + 3CCl_4 = WCl_6 + 3COCl_2$$

In all the compounds investigated the tungsten is hexavalent. The oxychlorides  $WOCl_4$  and  $WO_2Cl_2$  dissolve more quickly than  $WCl_6$  in the 12% NaOH solution. The following values were found

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504/78-3-12-8/36

III. The Determination of the Heat of Formation of Chlorine Derivatives of Hexavalent Tungsten

for the respective heats of formation of  $WCl_6$ ,  $WOCl_4$ , and  $WO_2Cl_2$ : -163.1, -177.5 and -199 kcal/mole. The heats of formation of the chlorides and oxides of the elements of the fifth group in the periodic system were compared and for chromium, molybdenum, tungsten, and uranium almost equal values were found for the  $\Delta H_{\text{formation}}$  for  $MO_2Cl_2$  and corresponding oxides  $MO_3$ . There are 1 figure, 4 tables, and 12 references, 6 of which are Soviet.

SUBMITTED: August 5, 1957

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THORS: Shchukarev, S. A., Novikov, G. I., SOV/79-28-7-03/64  
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TITLE: Letter to the Editor (Pis'mo v redaktsiyu). On the Problem  
 Concerning the Thermodynamic Investigation of the Lowest  
 Tungsten Chlorides (K voprosu o termodinamicheskoy issledovani  
 nizshikh khloridov vol'frama)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol. 28, Nr 7,  
 pp. 1998 - 1999 (USSR)

ABSTRACT: The authors determined by means of the membrane zero reading  
 manometer produced of quartz the pressures of the saturated  
 and unsaturated vapor of tungsten pentachloride according to  
 the static method. They found according to the optical tenso-  
 metric method that the gaseous tungsten pentachloride dispropo-  
 tionates under the formation of tungsten tetra- and tungsten hexa-  
 chloride. By the direct determination of the molecular weight  
 of the vapor of tungsten pentachloride they found 10%  $W_2Cl_{10}$ .

Card 1/3 According to the same method with the quartz membrane they  
 determined the disproportioning pressures of  $WCl_2$  and  $WCl_4$ .

Letter to the Editor. On the Problem Concerning the SOV/79-28-7-63/64  
Thermodynamic Investigation of the Lowest Tungsten Chlorides

It was found that the tetrachloride disproportionates in the gaseous phase under the formation of pentachloride, and the dichloride under the formation of penta- and tetrachloride. According to the pressure data of vapor obtained the thermodynamic character of the processes was calculated (Table 1). As far as these experimentally obtained thermodynamic data had not been described in publications it may be assumed that those obtained by the authors are obviously more accurate than those mentioned in tables.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet (Leningrad State University)

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Letter to the Editor. On the Problem Concerning the SOV/79-28-7-63/64  
Thermodynamic Investigation of the Lowest Tungsten Chlorides

1. Tungsten chlorides--Thermodynamic properties
2. Tungsten chlorides--Vapor pressure
3. Vapor pressure--Determination

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