84397

Preparation of the Radioactive Isotope Kr^{35} and Investigation of Its Gamma Radiation

S/056/60/039/004/015/048
B004/B070

and АИ-100 (AI-100)[28] analyzer. The gamma yield of Kr^{35} was found to be (0.41±0.06)% per decay. This value is significantly lower than that given by H. Zeldes et al. (Ref. 1). The authors checked the data by measurements on I^{131} and Cs^{134} whose gamma quantum yield is exactly known. There are 6 references: 3 Soviet and 3 US.

IX

SUBMITTED: May 23, 1960

Card 2/2

NAKHUTIN, I. Ye.

S/170/61/004/005/002/015
B104/B205

21.4210

AUTHORS: Buleyev, N. I., Vvedenskiy, V. N., Nakhutin, I. Ye., Pyshin, V. K.

TITLE: Calculation of the temperature and the adsorptive capacity of an adsorbent with internal sources of heat

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 4, no. 5, 1961, 8-11

TEXT: The effect of dissipation of radioactive radiation on the temperature and capacity of an adsorbent has been studied. A gas containing a radioactive component is blown through a tube of radius r_0 and length z_0 along the axis. The tube is filled with a granular adsorbent. The authors attempted to determine the capacity of the adsorbent under steady conditions. Therefore, it is obviously necessary to find the temperature distribution in the adsorbent as a function of r and z. This temperature distribution is expressed by the differential equation

$$\lambda\left(\frac{\partial^2 t}{\partial r^2}+\frac{1}{r}\frac{\partial t}{\partial r}+\frac{\partial^2 t}{\partial z^2}\right)-GC_p\frac{\partial t}{\partial z}=-g(t) \quad (1),$$

Card 1/5

where λ is the effective coefficient of thermal conductivity of the granular adsorbent in the gas concerned, C_p the specific heat of the gas, ε the density of the internal sources of heat, and G the weight of the gas passing through the tube per unit time. $g(t)$ is proportional to the amount $q(t)$ of radioactive gas adsorbed per unit volume at temperature t, and is proportional to the mean energy E of one decay and inversely proportional to half-life T: $g = 0.69\, nq(t)E/T$, where n is the Loschmidt number. $q(t)$ can be expressed by the empirical relation $q(t) = q(t_0)\exp\{-k(t-t_0)\}$. k depends on the partial pressure p of the radioactive component but not on temperature. If $z_0/r_0 \gg 1$ and if the heat transport through the gas stream is much larger than the heat transport effected by heat conduction along z, i.e., if the term $\lambda\partial^2 t/\partial z^2$ in (1) is negligible, then it is possible to represent (1) in the form

$$\partial^2\tau/\partial\rho^2 + \frac{1}{\rho}\,\partial\tau/\partial\rho - \beta\partial\tau/\partial\xi = -\gamma\exp(-\tau) \quad (5)$$

after introduction of the variables $\rho = r/r_0$, $\xi = z/r_0$, and $\tau = k(t-t_0)$.

Card 2/5

Calculation of the temperature and the...

(5) is solved with the following boundary conditions:

$\tau_{\rho=0} = 0$, $(\partial\tau/\partial\rho)_{\rho=0} = 0$, $(\partial\tau/\partial\rho)_{\rho=1} = -\alpha r_0 \tau/\lambda = -\delta\tau$ (8.2),

where α is the heat-exchange coefficient at the boundary between the adsorbent and the wall of the tube. If $\beta = 0$, Eq. (5) can be represented in the form

$$\tau'' + \tau'/\rho = -\gamma\exp(-\tau) \quad (9).$$

The solution of this equation reads: $\tau = 2\ln(\gamma_1\rho^{h_1} + \gamma_2\rho^{h_2}) - \ln W$ (10), where γ_1 and γ_2 are constants, and $h_{1,2}$ are roots of the equation $h^2 - 2h + c/2 = 0$. It is shown that h_1 or h_2 must be equal to zero and $c = 0$. Thus, one obtains

$$\tau = 2\ln(\gamma_1 + \gamma_2\rho^2) - \ln(\gamma_1\gamma_2 - \gamma) = \ln\left[-\frac{\gamma}{8}\left(\sqrt{\gamma_1/\gamma_2} + \rho^2\sqrt{\gamma_2/\gamma_1}\right)^2\right], \quad (12)$$

Hence, the solution depends only on γ since γ_1/γ_2 can be determined from the condition (8.2): $f = \gamma_1/\gamma_2 = -(4/\gamma + 1) - \sqrt{16/\gamma^2 + 8/\gamma}$ (13),

Card 3/5

wherefrom it follows that $\tau = \ln(f+\rho^2)^2/(f+1)^2$. When $\tau = F(\rho)$ is found, also the adsorptive capacity can be easily calculated:

$$Q = 2\pi r_0^2 z_0 q(t_0) \int_0^1 \frac{(f+1)^2}{(f+\rho^2)^2} \rho d\rho = Q_0 \left(1 + \frac{1}{f}\right). \quad (17)$$

In general, Eq. (5) cannot be solved by quadratures, and numerical methods are applied instead. Such calculations have been made, and Fig. 2 shows the solutions obtained for three different values of γ. This figure illustrates the effect of the gas stream on temperature: In the initial part τ is notably smaller than at a certain distance from the inlet. From a certain value of $\xi = z/r_0$ onward τ may be assumed to equal the reduced temperature which holds for an infinitely extended cross section and is obtained from (14). There are 2 figures and 6 references: 5 Soviet-bloc and 1 non-Soviet-bloc.

SUBMITTED: October 3, 1960

Card 4/5

NAKHUTIN, I.Ye.

Solubility of hydrogen in palladium. Zhur. fiz khim. 36 no.1:235-236 Ja '62. (MIRA 16:8)

(Palladium--Hydrogen content)

NAKHUTSRISHVILI, G.Sh.

Seasonal dynamics of vegetation of subalpine meadows in connection with ecological conditions in the Lagodekhi Preserve. Soob.AN Gruz.SSR 23 no.6:699-702 D '59. (MIRA 13:6)

1. Institut botaniki AN GruzSSR, Tbilisi. Predstavleno akademikom N.N.Ketskhoveli.
(Lagodekhi Preserve--Botany)

NAKHUTSRISHVILI, G. Sh., Cand Biol Sci -- (diss) "Seasonal dynamics of subalpine meadows in the Lagodekhskiy National Forest in relation to ecological conditions." Tbilisi, Academy of Sciences Georgian SSR Publishing House, 1960. 30 pp; (Tbilisi State Univ im I. V. Stalin); 150 copies; free; (KL, 51-60, 117)

NAKHUTSRISHVILI, G. Sh.

Seasonal dynamics of plants in an Agrostis-Trifolium subalpine meadow association in the Lagodekhi State Preserve. Soob. AN Gruz. SSR 26 no.1:53-58 Ja '61. (MIRA 14:3)

1. Akademiya Nauk Gruzinskoy SSR, Institut botaniki. Predstaveleno adademikom N.N. Ketskhoveli.
(Lagodekhi Preserve--Plant communities)

NAKHUTSRISHVILI, G.Sh.; LORIKIPANIDZE, M.P.

Study of the aspection of alpine meadows in the Kazbegi region.
Trudy Tbil.bot.inst. 23:101-111 '64.

(MIRA 18:4)

NAKHUTSRISHVILI, I.G.

New species of pileate fungus from Georgia (Species nova fungi Cantharellus e Georgia). Bot.mat.Otd.spor.rast. 9:157-158 My '53.
(MLRA 7:2)

(Georgia--Mushrooms) (Mushrooms--Georgia)

NAKHUTSRISHVILI, I. G.

"Data on the Study of Parasitic Microflora of the Samgorsk Valley". Tr Tbilis Botan In-ta AN GruzSSR, No. 15, pp 147-158,

Results of the mycological examination of the Samgorsk Valley and the southwest slope of Tsivgomborskiy Ridge are presented. In all, 268 species and 46 forms of fungi were found, of which 34 species and 2 forms were found for the first time in Georgia. It is shown that the steppe region is considerably poorer in regard to species composition of fungi than the wooded region and the meadow zone of the steppe region. The areas of habitation of the majority of species coincide with those of the plants which nourish the fungi. It is noted that the same plants which appear to be healthy in the drier zone of the steppe region are affected by the fungi in the wooded and meadow zones. (RZhBiol, No. 10, 1955)

SO: Sum No 884, 9 Apr 1956

NAKHUTSRISHVILI, I.G.

Materials on a study of hymenomycetous fungi of Zemo Imeretia.
Trudy Tbil.bot.inst. 19:29-43 '58. (MIRA 12:8)
(Imeretia--Hymenomycetes)

NAKHUTSRISHVILI, I.G.

Some recent data on the fungal flora of Georgia. Zam. po sist. i geog. rast. no.20:14-17 '58. (MIRA 12:9)
(Georgia--Hymenomycetes)

NAKHUTSRISHVILI, I.G.

Interesting habitat of Battarrea phalloides Pers. Bot.mat. Otd.spor.rast. 12:262 Ja '59. (MIRA 12:12)
(Borzhomi region--Gasteromycetes)

NAKHUTSRISHVILI, I.G.

Collybia retigera Bres. in the Georgian S.S.R. Bot. mat. Otd. spor. rast. 14:206-207 Ja'61. (MIRA 17:2)

NAKHUTSRISHVILI, I.G.

New representatives of the order Agaricales in Georgia. Zam. po sist. i geog. rast. no.23:19-22 '63.

(MIRA 17:12)

NAKHUTSRISHVILI, I.G.

Materials on the cap fungi of eastern Georgia. Trudy Tbil.bot.inst. 23:63-87 '64. (MIRA 18:4)

MAKHUTSRISHVILI, Sh. G.

Nakhutsrishvili, Sh. G.- "The vegetation of the v-ri-aged fallow lands of Dzhavakhetia," Trudy Tbilis. botan. in-ta, Vol. XII, 194?, p. 287-304, (In Georgian, resume in Russian), - Bibliog: 9 items

SO: U-4934, 29 Oct 1953, (Letopis 'Zhurnal 'nykh Statey, No. 16, 1949).

NAKHUTSRISHVILI, Sh.G.

Vegetation on the slopes of ridges in the Alazani Basin and the importance of their degradation in the mudflow phenomena. Trudy Geog. ob-va Gruz. SSR no.3:115-129 '58. (MIRA 12:9)
(Alazani Valley--Physical geography)

NAKHUTSRISHVILI, Sh.G.

Dynamics of herbage and productivity of principal plant associations in winter pastures of eastern Georgia. Trudy Thil.bot.inst. 19:363-429 '58. (MIRA 12:8)
(Georgia--Pastures and meadows)

NAKHUTSRISHVILI, Sh.G.

Grass stand dynamics in the subalpine meadows of Georgia. Probl. bot. 5:182-189 '60. (MIRA 13:10)

1. Botanicheskiy institut AN GruzSSR, Tbilisi.
(Georgia--Pastures and meadows)

NAKHUTSRISHVILI, Sh.G.

Materials on the organization of efficient use of natural pastures in Georgia. Trudy Tbil.bot.inst. 21:215-228 '61. (MIRA 14:10)
(Georgia--Pastures and meadows)

NAKHUTSRISHVILI, Sh.G.; KETSKHOVELI, N.N., red.; CHICHUA, S.K., red.izd-va; BOKERIYA, N.B., tekhn. red.

[Dynamics of the production of alpine pastures in Georgia] Dinamika proizvoditel'nosti vysokogornykh pastbishch Gruzii. Tbilisi, Izd-vo AN Gruz.SSR, 1963. 151 p. (MIRA 17:1)

KETSKHOVELI, Nikolay Nikolayevich; NAKHUTSRISHVILI, Shalva Georgiyevich

[Some noxious, poisonous and weed plants in the hayfields and pastures of Georgia] [Nekotorye vrednye, iadovitye i sornia-kovye rasteniia senokosov i pastbishch Gruzii. Tbilisi] 1963. 55 p. [In Georgian] (MIRA 17:5)

NAKICENOVIC, Slobodan, dipl. inz.

Apropos of the first issue. Nuklear energija 1 no.1:1-2 Jl '64.

1. Undersecretary of State, Secretary of the Federal Commission for Nuclear Energy.

YUGOSLAVIA

Dr Borislav MAKIC, Department of Physiology, Medical Faculty of University (Zavod za fiziologiju Medicinskog fakulteta Sveucilista), Zagreb.

"Tissue Transplantation."

Zagreb, Lijecnicki Vjesnik, Vol 85, No 2, 1963; pp 117-138.

Abstract [English summary modified]: A very comprehensive review of the transplantation immunity problem, discussing Medawar, Burnet, Lederberg, Main; author's experiment with homograft tolerance during parabiosis in mice; lymphopenic cachexia is primary common denominator of runt disease secondary transplantation and of parabiotic disease rather than any direct attack of donor tissues and cells onto recipient in cases where animals are rendered tolerant to transplanted tissues. Same occurs clinically in men given bone marrow for radiation disease. Two Czech, 6 Yugoslav (author's group, including his 1962 thesis,) 60 Western refs. Also 3 diagrams, 4 photographs, 2 photomicrographs (chromosomes).

1/1

NAKIĆENOVIC, S.

Fortieth anniversary of the League of Communists of Yugoslavia. p. 97

RADIOAMATER. (Savez radioamatera Jugoslavije) Beograd, Yugoslavia
Vol. 13, no.4, April 1959.

Monthly list of East European Accessions (EEAI) LC, Vol.8, no.9, Sept. 1959

Uncl.

ROLSKI, Stanislaw; NAKIELSKA, Lucyna; ROSZKOWSKA, Zdzislawa

Isolation of L-cystine as dihydrochloride from human hair hydrolozates. Acta Pol. pharm. 22 no.2:129-131 '65.

1. Z Katedry Chemii Farmaceutycznej Akademii Medycznej w Warszawie (Kierownik: prof. dr. S. Rolski).

NAKIMOV, M. D. M.

"Internal Stresses Setup During Hardening of Steel," pp 224/237 in Modern Methods of Heat Treating Steel by Dom Inzhenera i Tekhnika imeni F E Dzerzhinskovo. Gosudarstvennoye Nauchno-Tekhnicheskoye Izdatel'stvo Mashinostroitel'noy Literatury, Moscow (1954) 404 pp.

Evaluation B-86350, 30 Jun 55

NAKIMOVSKAYA, M. I.

Mbr., Microbiology Inst.,Dept. Biol. Sci., Acad. Sci., -1939-47-.

"The Influence of Bacteria on the Germination of Rust Spores,"

Mikrobiol., 8, No. 1, 1939;

"Pseudomonas Aurantiaca Nov. Sp.," ibid., 16, No. 1, 1948.

NAKLADAL, J.

Power for a concrete mixer. p. 172.
STAVIVO, Praha, Vol. 33, no. 5, May 1955.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, no. 10, Oct. 1955, Uncl.

CZECHOSLOVAKIA/Farm Animals; Cattle Q-2

Abs Jour : Ref Zhur - Biol., No 8, 1958, No 35673

Author : Nakladal Jaroslav
Inst : Not Given
Title : The Problem of the Meat Production of Cattle (K voprosu o myasnoy produktivnosti krupnogo rogatogo skota)

Orig Pub : Nas chov, 1957, No 10, 275-276

Abstract : With a milk yield of 4,133-4,253 kg. and a fat content of 4%, for a lactation, the meat production of the adult and young cattle of the local breeds was also high. The average slaughter weight of cows aged up to 8 years was 562 kg., and the output of meat - 56.4%; the slaughter weight of cows over 8 years of age was 531 kg., and the meat output was 52.4%; for calves aged 1 to 2 years, the respective figures were 445 kg. and 56.1%; for heifers over 2 years of age - 548 kg. and 60.70%; for young bulls aged 1 to 2 years - 476 kg. and 57.8%. Since the results obtained were found to be higher than the corresponding average indexes for the country as a whole, it

Card : 1/2

NAKLADAL, J.

"New results in the research on the breeding and nutrition of cattle."

p. 195 (Vestnik, Vol. 5, No. 4, 1958, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, no. 9, September 1958

STEJSKAL, Jan; PLESNIK, Jan; HRUSKA, Ladislav; SVOBODA, Jaroslav; NAJMR, Stanislav; PREININGER, Miroslav; HAUNER, Frantisek; BENDA, Josef, inz.; KRAJCOVIC, Vladimir; VLCEK, Kvetoslav; KRBLICH, Jan; CERNY, Ladislav,Dr.; DVORACEK, Miroslav, inz. dr.; CHYTRA, Frantisek, inz.; FOLTYN, Jiri; VYSKOT, Miroslav; STAMBERA, Jaroslav, C.Sc. Doc.Inz.; KOSIL, Vladimir; STUCHLIK, Jaroslav, Inz.; NAKLADAL, Jaroslav, Inz.; RICHTER, Lev, MVDr.

Statements of directors of institutes, and of managers of workplaces of the Czechoslovak Academy of Agricultural Sciences. Vestnik CSAZV 8 no.8/9:496-531 '61.

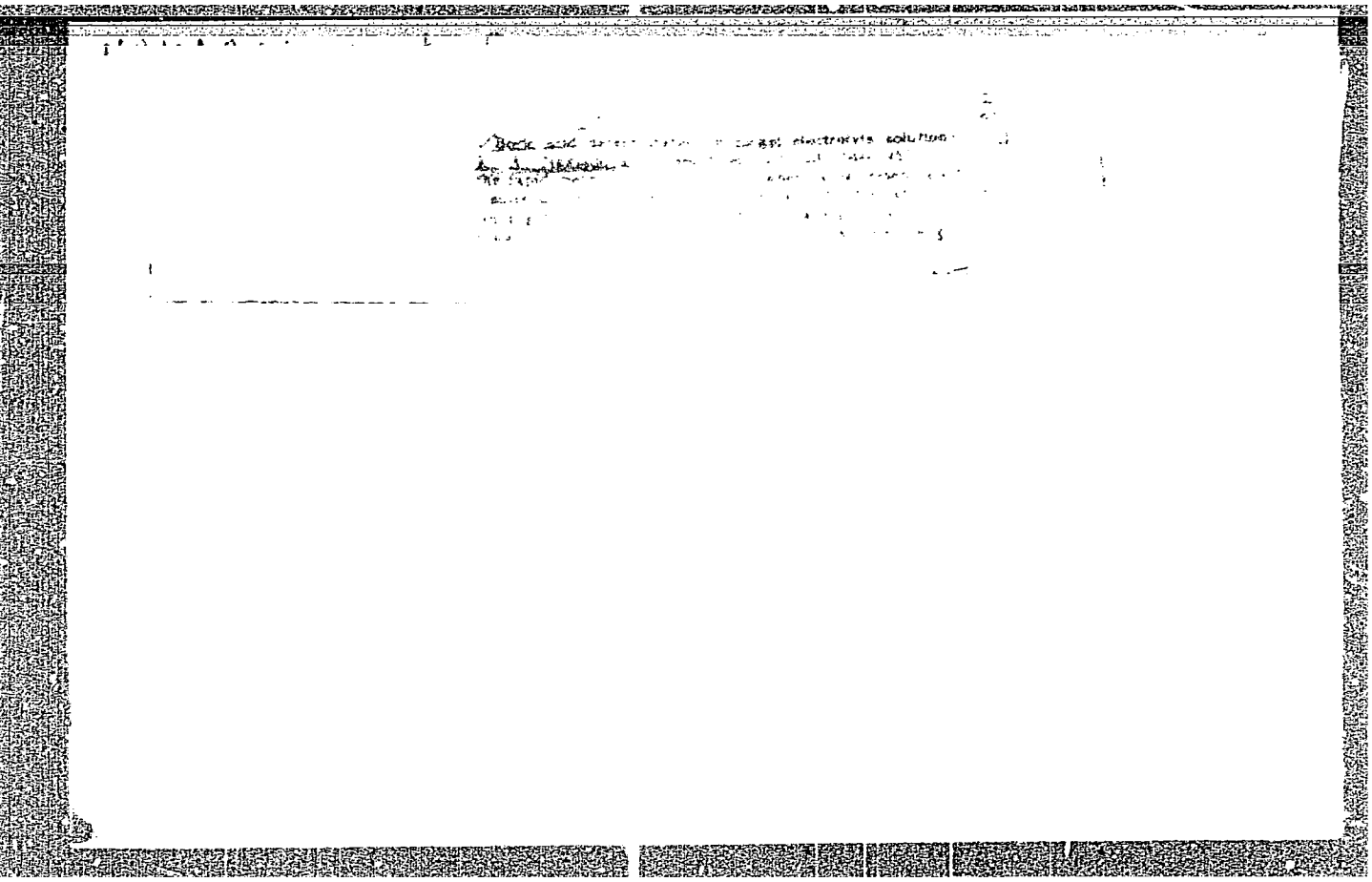
1. Dopisujici clen Ceskoslovenske akademie zemedelskych ved (for Stejskal, Plesnik, Hruska, Svoboda, Najmr, Preininger, Hauner, Benda, Krajcovic, Krblich, Dvoracek, Foltyn, Vyskot, Kosil) 2. Clen redakcni rady Vestniku Ceskoslovenske akademie zemedelskych ved (for Plesnik, Preininger, Foltyn, Vyskot) 3.Reditel Vyzkumneho ustavu zivocisne vyroby Ceskoslovenske akademie zemedelskych ved v Uhrinevsi (for Dvoracek) 4. Reditel Ustavu pro vedeckou soustavu hospodareni Ceskoslovenske akademie zemedelskych ved v Praze (for Benda)

(Czechoslovakia—Agriculture)

NAKLADAL, Jaroslav

Revision of the Czechoslovak standard on the exposure time of shutters. Normalizace 11 no.4:113-115 Ap '63.

1. Meopta, n.p., Prerov.



APPROVED FOR RELEASE: Monday, July 31, 2000 CIA-RDP86-00513R001136020

[illegible] EWG(a)/EWG [illegible]/EWG [illegible] EWT [illegible]/FS(v)-[illegible] [illegible]
ACCESSION NR: AP4[illegible] [illegible]

[illegible] Naz[illegible]
(Colonel [illegible] candidate of pedagogical sciences, Docent) [illegible]

TITLE: Vertical swings

SOURCE: Aviatsiya i kosmonavtika, no. 2, 1964, 83-84

TOPIC TAGS: weightlessness, vestibular apparatus, space orientation, nausea, perspiration, cosmonaut training, vertical swing

ABSTRACT: A vertical swing is described which is used to train cosmonauts to adapt to phenomena encountered in space flights. A detailed description of the mechanical parts is given, including height, length, and width of the apparatus, as well as the seating arrangement. The effects of both active (self-sustained) and passive (helped by a comrade) swinging are noted. An increase in blood pressure and muscle tone was recorded during passive swinging. Other autonomic [illegible] noted were paleness, perspiration, [illegible] [illegible] It is pointed out that [illegible] swing [illegible] the vestibular apparatus [illegible] [illegible] and the [illegible] [illegible] different analyzers under new conditions [illegible]. The authors point out that this swing will help to improve the quality of space flights and will make them accident-free

Card 1/2

L 23104-65
ACCESSION NR: AP4050002

Orig. art. has: 1 figure.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: PH

NO REF SOV: 000 OTHER: 000

Card 2/2

BRIKOV, K.; NAKLONOV, YU., dots.

Vertical swing. Aviats kosmonavt 6 no. 4: 9 '64.

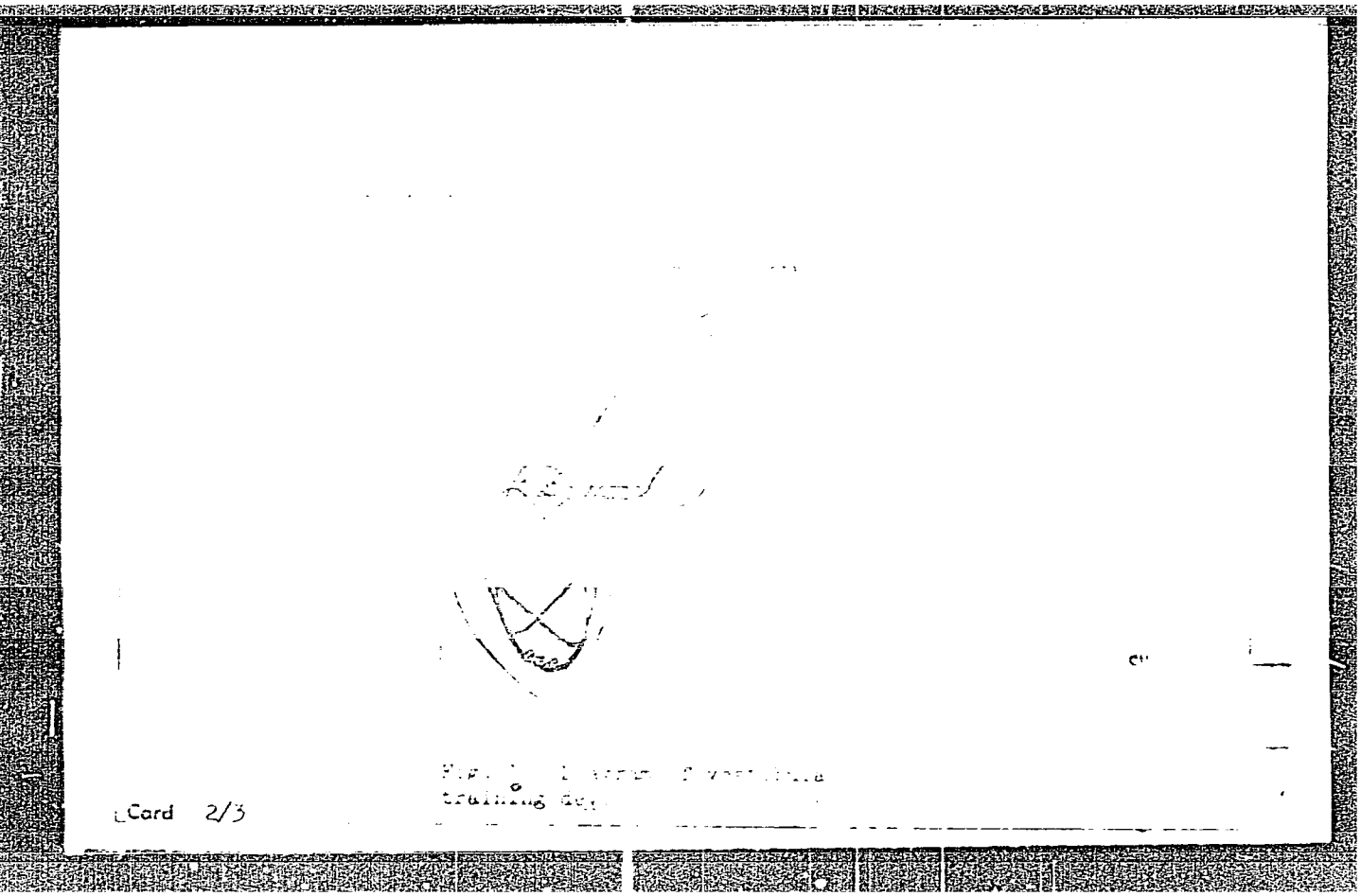
[illegible]

SOURCE: Aviatsiya i kosmonavtika, no. [illegible], 19[illegible], 64

TOPIC TAGS: astronaut training, astronaut, training equipment, pilot training

ABSTRACT: The development of proficiency in spatial orientation by conditioning the

Card 1/3



APPROVED FOR RELEASE: Monday, July 31, 2000 CIA-RDP86-00513R001136020

L 5[illegible]-65
ACCESSION NR: AP5014817

This vestibular training device has three parts. The upper part consists

[illegible]: none

SUBMITTED: 00	ENCL: 00	SUB CODE: SV, AC
NO REF SOV: 000	OTHER: 000	ATD PRESS: 4008-F

Card 3/3

BARAT, T.; NAKO, A.

Data on the technic of vestibular cold-warm stimulation; calorigram proposition. Magy. sebeszet 4 no.4:301-305 1951. (CLML 21:4)

1. Doctors. 2. Nose-Throat-Ear Clinic (Director--Prof. Dr. Gyula Varga) of Budapest Medical University.

NAKO,A

NAKO A., SOLYMOSS B.

A streptomycin okozta vestibularis laesio kardesehez; histochemiai vizsgalatok streptomycinkezelt tengeri malacokon. /Lesions of the vestibule of the labyrinth caused by streptomycin; histochemical experiments on guinea-pigs treated with streptomycin/ Orv. hetil., Budap. 92:25 24 June 51 p. 793-5.

1. Doctors. 2. Nose, Throat, and Ear Clinic (Director--Prof. Dr. Tibor Corman), Budapest Medical University, and Prosectorium (Head Physician--Dr. Gyorgy Romhanyi, Honorary Lecturer), Szombathely General Hospital.
CIML Vol. 20, No. 10 Oct 1951

Nako, H.

HAJTS, G.; NAKO, A.

Clinical variations in pathology due to insufficient penicillin therapy.
Orv. hetil. 93 no. 7:220-222 17 Feb 1952. (CLML 23:3)

1. Doctors. 2. Ear, Nose, and Throat Clinic (Director -- Prof. Dr. Gyula Varga), Budapest Medical University.

NAKO, A.,prof.

Symptomatology and therapy of tonsillar diseases. Ther. hung. no.1:14-17 1956

1. Clinic of Otor-rhino-laryng. (Dir. Prof. G. Varga)Univ. of Budapest.

(TONSILS, dis.
sympt. & ther. of various dis.)

EXCERPTA MEDICA Sec.16 Vol.5/5 Cancer May 1953

NAKO, A

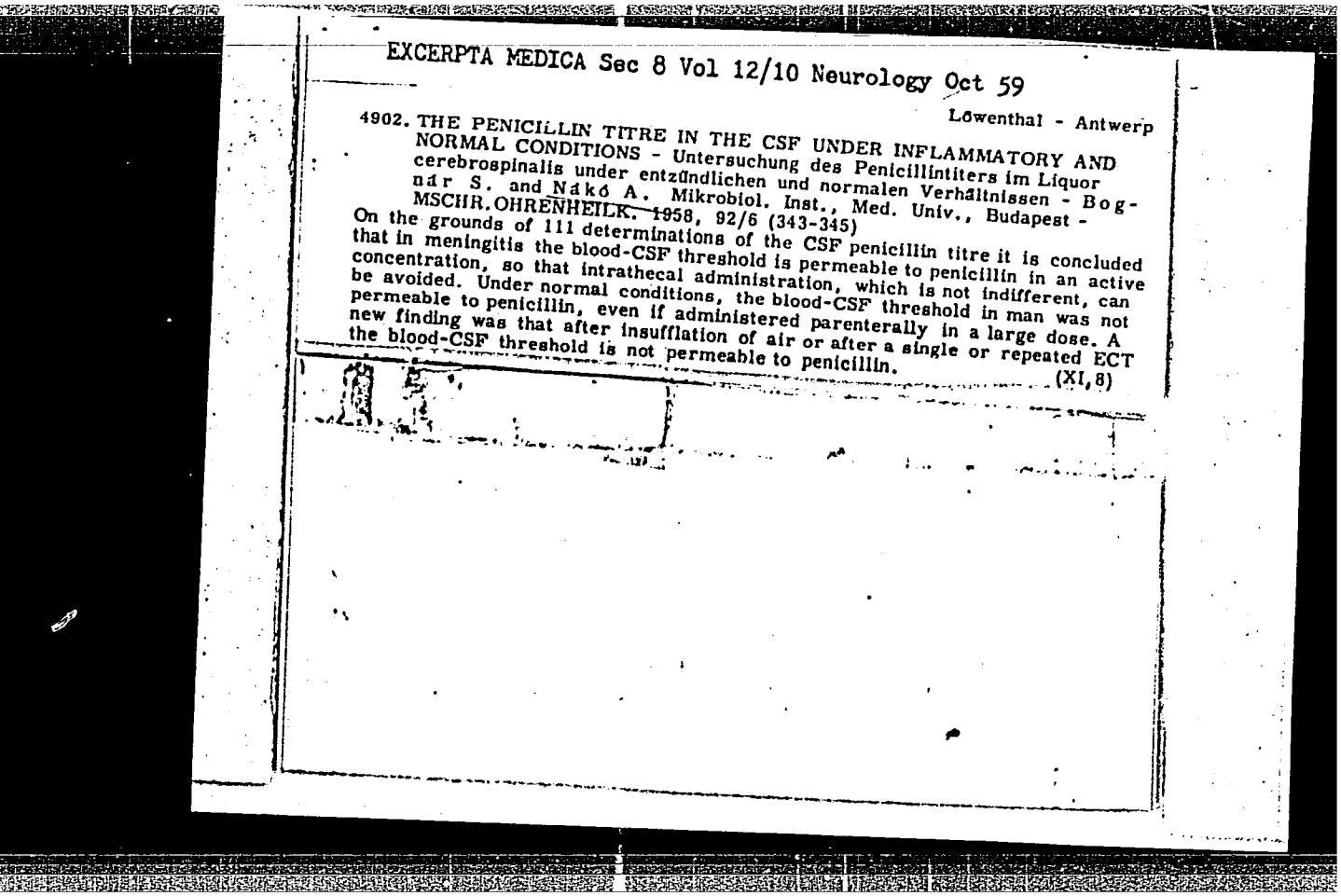
2028. *After-treatment following total laryngectomy* Über die Nachbehandlung der Totalexstirpation des Kehlkopfes. NAKÓ A. and VATHY I. Univ.-Klin. für Hals-Nas.-Ohren-Krank., Budapest *H.N.O. (Berl.)* 1957, 6/7 (210-214) Tables 2 Illus. 1

Postoperative treatment is discussed with reference to 238 cases of total laryngectomy collected during the past decade. The factors in preparation and peroperative influences affecting the duration of wound healing are discussed. The sequence of postoperative measures is given. Antibiotic treatment and protection are discussed in detail, as are problems on drainage of the operative area and the effect of resection of the tongue-bone on wound healing. Questions of postoperative nutrition, technique of pressure bandaging to facilitate wound healing, and treatment of complications are discussed with reference to personal experience. The postoperative treatment of the ever-increasing number of patients previously given irradiation is discussed in detail. Various statistics on matters of wound healing are presented.

NAKO, A.; SOLTI, F.; FOLDI, M.; KOLTAY, E.

The effect of strophanthin on parotid secretion. Acta med. hung. 12 no.3-4:295-298 1958.

1. 1st Department of Medicine and Department of Oto-Rhino-Laryngology, Medical University, Budapest.
(STROPHANTHIN, effects
on parotid saliva secretion)
(PAROTID GLANDS, eff. of drugs on
strophanthin on saliva secretion)



EXCERPTA MEDICA Sec 8 Vol 12/10 Neurology Oct 59

Löwenthal - Antwerp

4902. THE PENICILLIN TITRE IN THE CSF UNDER INFLAMMATORY AND NORMAL CONDITIONS - Untersuchung des Penicillintiters im Liquor cerebrospinalis under entzündlichen und normalen Verhältnissen - Bognár S. and Nákó A. Mikrobiol. Inst., Med. Univ., Budapest - MSCHR. OHRENHEILK. 1958, 92/6 (343-345)

On the grounds of 111 determinations of the CSF penicillin titre it is concluded that in meningitis the blood-CSF threshold is permeable to penicillin in an active concentration, so that intrathecal administration, which is not indifferent, can be avoided. Under normal conditions, the blood-CSF threshold in man was not permeable to penicillin, even if administered parenterally in a large dose. A new finding was that after insufflation of air or after a single or repeated ECT the blood-CSF threshold is not permeable to penicillin. (XI, 8)

NAKO, ANDRAS, DR.

BOGNAR SZILARD, Dr.; NAKO, Andras, Dr.

Examination of the penicillin titer of the cerebrospinal fluid in inflammatory and normal conditions. Orv. hetil. 99 no.8-9:274-275 23 Feb - 2 Mar 58.

1. A Budapesti Orvostudomanyi Egyetem Mikrobiologiai Intezetenek (igazgato: Alfoldy Zolton dr. egyet. tanar) es Ful-orr-gegeklinikajanak (igazgato: Varga Gyula dr. egyet tanar) kozlemenye.

(PENICILLIN, admin.
intramusc., permeability of hemato-encephalic barrier to penicillin in ther. of meningitis & in normal man (Hun))
(HEMATO-ENCEPHALIC BARRIER
permeability to penicillin after intramusc. admin. in ther. of meningitis & in normal man (Hun))
(MENINGITIS, ther.
penicillin, intramusc. admin., permeability of hemato-encephalic barrier to penicillin (Hun))

SOLTI, Ferenc, Dr.; FOLDI, Mihaly, Dr.; NAKO, Andras, Dr.; KOLTAY, Edit

Effect of novurit on the secretion of the parotid. Orv. hetil. 99 no.33: 1127-1128 17 Aug 58.

1. A Budapesti Orvostudomanyi Egyetem I. sz. Belklinikajanak (igazgato: Rusznyak Istvan dr. egyet. tanar) es Ful-orr-gegeklinikajanak (igazgato: Varga Gyula dr. egyet. tanar) kozlemenye.

(DIURETICS, MERCURIAL, eff.
mercurophylline on parotidean secretion (Hun))
(PAROTID GLAND, eff. of drugs on
mercurophylline on secretion (Hun))

SOLTI,F.; FOLDI,M.; NAKO,A.; KOLTAY,E.

Effect of acetazolamide (fonurit) on secretion of the parotid glands. Kiserletes Orvostud. 12 no.2:195-197 Ap '60.

1. Budapesti Orvostudomanyi Egyetem I. sz. Belklinikaja es Ful-Orr-Gegklinikaja.
(ACETAZOLAMIDE pharmacol.)
(PAROTID GLAND pharmacol.)

HAKO, Andras, dr.

Surgical indications in cancer of the larynx. Ful-orr-gegegyogy 7 no.1:23-27 F '61.

1. A Budapesti Orvostudomanyegyetem Ful-orr-gegeklinikajanak (Igazgato: Varga Gyula dr. egyet. tanar) kozlemenye.
(LARYNX neopl)

NAKO, Andras, dr.

Partial laryngectomy. Ful-orr-gegegyogy 7 no.3:121-130 S '61.

1. A Budapesti Orvostudomanyi Egyetem Ful-orr-gegklinikajanak (igazgato: Varga Gyula dr. egyet. tanar) kozlemenye.

(LARYNX surg)

NAKO, Andras, dr.

Experiences with stapedectomy. Fulorrgegegyogyaszat 10 no.1: 3-10: Ja'64

1. A Peterfy Sandor utcai korhaz (Budapest) Ful-gegeosztalyanak (Foorvos: Nako, Andras, dr.) kozlemenye.

NAKO, I.

Before the afforestation campaign. p. 17

Vol. 9, no. 9, Sept. 1955
PER BUJQESINE SOCIALISTE.
Tirane, Albania

SO: East European Accession Vol. 5, No. 4, April 1956

NAKO, I.

NAKO, I. Forest canes. p.18.

Vol. 9, No.12, Dec. 1955, PER BUJQESINE SOCIALISTE, Tirane, Albania.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 10, Oct. 1956.

NAKO, I.

"Conditions for the development of erosion in Albania and measures against it."

p. 26 (Per Bujqesine Socialiste) Vol 12, no. 1, Jan. 1958.
Tirane, Albania

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4, April 1958

TITLE: Solid lubricants thickened with soaps of the mixtures of unsaturated acids and with synthetic (saturated) fatty acids

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 5, 1965, 45-49

TOPIC TAGS: lubricant, solid lubricant, lubricant viscosity, soap, saturated hydrocarbon, acid, unsaturated compound, synthetic hydrocarbon / US 2 grease, US automobile grease, 3V spindle oil, 3V engine oil, [illegible] acid

ABSTRACT: The effect of the degree of saturation of the fatty acid radical in calcium soaps on the structure and properties of hydrocalcium [illegible] was studied in an effort to improve the quality of synthetic lubricants. Because synthetic fatty acids (SFA) contain primarily the saturated carboxylic acids, it was assumed that the addition of unsaturated acids would change drastically the properties of their calcium soaps, resulting in end-products identical in quality

Card 1/4

L 53616-65

ACCESSION NR: AP5011691

to the natural ones. The solid lubricants described here were made from a mixture of 3V spindle oil and SV engine oil with viscosity of 39.2 centistoke at 50C. DOZhV (TU MKhP 250 51) oleic acid, the SFA fractions No. [illegible] and [illegible], and their mixtures served as the saponification stock. The SFA composition was determined chromatographically. The samples of lubricants were prepared in an autoclave. The process and the quality evaluation method used in these experiments were described previously [illegible]

Card [illegible]

ACCESSION NR: AP5011691

unsaturated acids: 60-75%; SFA: 25-40%. Orig. art. has: 2 tables and 3 figures.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 01 SUB CODE: FP

NO REF SOV: 006 OTHER: 000

Card 3/4

L 53616-65

ACCESSION NR: AP5011691

ENCLOSURE: 01

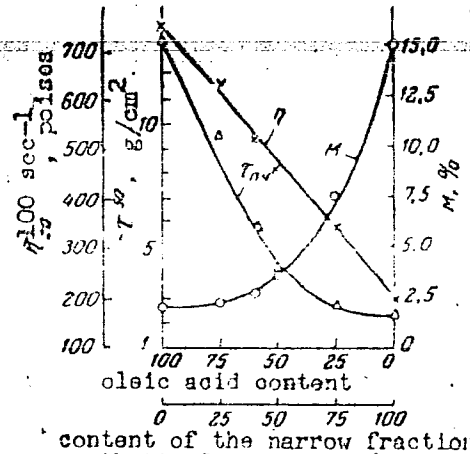


Fig. 1.

The effect of the composition of saponified stock (the mixture of synthetic fatty acids No. 3 and oleic acid) on the properties of solid lubricants

Card 4/4

L 07160-67 EWT(m) JAJ/DJ

ACC NR: AP6027599 (A) SOURCE CODE: UR/0318/66/000/007/0022/0025

AUTHOR: Sinitsyn, V. V.; Ishchuk, Yu. L.; Prokopchuk, V. A.; Goshko, N. S.; Nakonechna, M. B.

38
36
13

ORG: none

TITLE: Effect of adding glycerides of higher unsaturated acids on the properties of multipurpose lubricants

SOURCE: Neftepererabotka i neftekhimiya, no. 7, 1966, 22-25

TOPIC TAGS: high temperature lubricant, organic lubricant, solid lubricant, lubricant component, soap

ABSTRACT: In view of the extensive potential applications of multipurpose calcium-containing lubricants, studies were carried out in an attempt to eliminate some of their disadvantages, such as thickening during storage, hygroscopicity, and change in properties upon absorption of atmospheric moisture. It was found that the introduction of 1-3% glycerides of higher unsaturated carboxylic acids (e. g., eleostearic acid) into the composition of the lubricants (prepared by thickening mineral oils with calcium soaps of stearic and acetic acids) improved the viscosity-temperature and viscosity-speed characteristics. The products thus obtained considerably surpass ordinary solid lubricants in properties and can be used as universal multipurpose lubricants. Tests in roller bearings at 120° confirmed that the new lubricants had much

Card 1/2 UDC: 665.633-4:621.43.019.862.003.1

L 07160-67
ACC NR: AP6027599

2, 11.

better performance characteristics than the high-temperature lubricants 1-13, NK-50, etc. The tests were performed by P. S. Vakurov, to whom the authors are deeply grateful. Orig. art. has: 1 figure and 1 table.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 009/ OTH REF: 004

Card 2/2 mfe

KOZIN, V.M.; CHERVATYUK, V.F.; YAVORSKAYA, A.K. [IAvors'ka, A.K.]; NAKONECHNAYA, A.O. [Nakonechna, A.O.]

Using the dilatometric method for determining the complete setting (polymerization) of "plastic" concrete. Khim.prom. [Ukr.] no.1: 12-15 Ja-Mr '64. (MIRA 17:3)

NAKONECHNAYA, G. F.

Garlic

High yield of garlic. Sad i og., no. 7, 1952.

9. Monthly List of Russian Accessions, Library of Congress, _____1953. Unclassified.

SHORNIKOVA, N.M.; NAKONECHNAYA, G.F.; YAKOVLEVA, S.G.

Chemical and technological testing of cabbage varieties.
Kons.i ov.prom. 14 no.12:18-20 D '59. (MIRA 13:3)

1. Ukrainskiy nauchno-issledovatel'skiy institut ovoshchevodstva i kartofelya.
(Cabbage--Varieties)

NAKONECHNAYA, L.A.

USSR

Microcrystalloscopic detection of some metals with 8-quinolinol. V. D. Vasilenko, R. E. Reznik, and L. A. Nakonechnaya. *Trudy Komissii Anal. Khim., Akad. Nauk S.S.S.R., Otdel. Khim. Nauk* 5(8), 112-19(1954).—. The optical properties of their oxinates were used to detect Mo^{6+}, W^{6+}, V^{5+}, Ti^{4+}, UO_2^{++}, Cu^{++}, Zn^{++}, and Al^{3+}. Mo^{6+}, W^{6+}, and V^{5+} were detected in Cu solns., Zn solns., and steel. The 8-quinolinol (I) was usually in AcOH soln. For W, 2 drops 4% I soln. is added to a drop of sample on a slide. Dark-green rectangular crystals, frequently in rosettes, related to the triagonal system are formed. By pptn. with alc. I soln. larger crystals, sometimes with forked ends, are formed. Angle of extinction is 35–40°, crystal size 0.09–0.21 mm., and n is higher than that of I. Detectable min. is 0.05 γ W^{VI}, dilu. limit 1:400,000. For V, to a drop of sample is added 30% AcOH, a crystal of NaOAc, and excess 1% I soln. Bright-yellow monoclinic prisms appear but their form and color depend on the AcOH concn. By

(over)

acidifying with 80% AcOH dark-yellow octahedrons, prisms, and rectangles are formed; with 3% AcOH, pale-yellow rectangles. The n is higher than that of I. The crystals have pleochroism from light yellow to yellow, parallel and inclined extinction. Angle of extinction is 1-7°. The sign of the zone of the crystal is neg. Crystal size is 0.30-0.56 mm., detectable min. 0.03 γ V^{V}, dilu. limit 1:1,000,000. Mo oxinate is pptd. from 80% AcOH soln. by a 4% I soln. as yellow-green marbulites with pleochroism from light yellow to yellow-green. Detectable min. is 0.006 γ Mo^{VI}, dilu. limit 1:300,000. Ti is pptd. from mineral acid soln. by ale. I soln. and a crystal of NH_4SCN or KSCN. Bright-yellow, almost orange, cubes and trapeziura form. By pptn. from AcOH soln. are formed lemon-yellow cubes, rapidly grouping into dendrites. The crystals are related to the cubic system and are optically isotropic. Detectable min. is 0.2 γ Ti^{IV}, dilu. limit 1:80,000. For UO_2^{++}, a drop of sample is acidified with 3% AcOH, a drop of satd. NH_4OAc added, and the soln. heated to 80°. Addn. of 4%

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I soln. forms a yellow ppt. which, by heating, turns to red-orange prisms (with truncated tips) which form rosettes. The crystals have parallel and inclined extinction angle of extinction 23–28°, and n higher than that of I. The size of these monoclinic crystals is 0.28–0.38 mm. Detectable min. is 0.044 γ UO_2^{++}, dilu. limit 1:230,000. Cu oxinate is pptd. in AcOH solns. buffered with NaOAc, in alk. Na tartrate soln., and in NH_4OH. Addn. of 4% I soln. ppts. dark-green to yellow needles which form rosettes. The needles have weak pleochroism, parallel extinction, and n higher than that of I. Detectable min. is 0.02 γ Cu^{++}, dilu. limit 1:250,000. For the Zn test, a drop of sample is acidified with 30% AcOH and heated to 60°. Addn. of 1% I soln. ppts. yellow-green elongated prisms. By pptn. from solns. buffered with NaOAc are formed X-crystals and dendrites. These monoclinic crystals have neg. zone index, weak pleochroism, parallel and inclined extinction, and n higher than that of I. The angle of extinction is 15–24°, crystal size 0.21–0.30 mm., detectable min. 0.038 γ Zn^{++}, dilu. limit 1:52,000. Pptn. of Al oxinate from AcOH soln. buffered with NaOAc forms long rectangles with split ends and grouped in rosettes. Also, a crystal of tartaric acid and a drop of NH_4Cl soln. are added to a drop of test soln. The

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3/4

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4/4

mixt. is neutralized by NH_4OH and heated to 70–80°. A 4% I soln. and a drop of NH_4OH are added and the mixt. is heated again. Yellow-green rectangles in rosettes ppt. The monoclinic prisms have parallel and inclined extinction, angle of extinction 10–24°, and neg. zone index. Crystal size is 0.13–0.30 mm., detectable min. is 0.01 γ Al^{+++}, diln. limit 1:300,000. W, V, and Mo can be detected in Cu solns., acidified with 30% AcOH and buffered by a crystal of NaOAc, by addn. of 1% I soln.; in the cold, the oxinates of V, Mo, and Cu are formed, and these can be differentiated by color, form, and size. On heating, W oxinate ppts. Limiting ratios are Cu:W = 6:1, Cu:V = 4:1, and Cu:Mo = 10:1. Similarly in Zn solns. limiting ratios are Zn:W = 5:1, Zn:V = 4:1, and Zn:Mo = 8:1. In Cu-Zn soln. only Cu oxinate is observed. For steel analysis several grains are dissolved in HCl (1:4), oxidized by drops of HNO_3, dild. with H_2O, and filtered. The ppt. is washed with dil. HCl (1:10). The ppt. contains WO_3 and SiO_2, the filtrate contains Mo, V, Fe, Cr, etc. The ppt. is heated on a slide with NaOH, neutralized, and acidified with glacial AcOH. Addn. of 4% I soln. ppts. yellow-green rectangles of W oxinate. The filtrate, after sepn. of WO_3 and SiO_2, is heated to boiling, made alk. with 5% NaOH, and filtered. This filtrate is heated to 80° and acidified with AcOH. Addn. of 4% I soln. forms yellow rectangles and prisms of V oxinate and yellow-green marbulites of Mo oxinate.

Eurilin Mayerle

L 20366-66 EWT(m)/T DJ

ACC NR: AP6006447 (A) SOURCE CODE: UR/0065/66/000/002/0027/0030

AUTHORS: Ishchuk, Yu. L.; Sinitsyn, V. V.; Goshko, N. S.; Nakonechnaya, M. B.; Prokopchuk, V. A.; Vakurov, P. S.

ORG: none

TITLE: Complex calcium greases derived from synthetic fatty acids

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 2, 1966, 27-30

TOPIC TAGS: grease, viscosity, organic synthetic process, lubricant, lubricant property, organocalcium compound / GOST 1707-51 No. 50 lubricant

ABSTRACT: The properties and performance of a number of calcium greases derived by adding 98% acetic acid and various synthetic fatty acids (containing from 7 to 25 carbon atoms in the molecule) to GOST 1707-51 industrial oil No. 50 were studied. The acid number, saponification number, iodine number, average molecular weight, melting point, and composition of the fatty acid fractions used are tabulated. Electronmicrophotographs of the synthesized greases are presented. The viscosity characteristics of the calcium greases were determined (see Fig. 1). It is concluded that the complex calcium greases derived from $C_{10} - C_{20}$ and $C_{17} - C_{20}$ fatty acids possess a sufficiently high mechanical stability, low viscosity at 0C,

Card 1/2 UDC: 621.892.8

L 20366-66

ACC NR: AP6006447

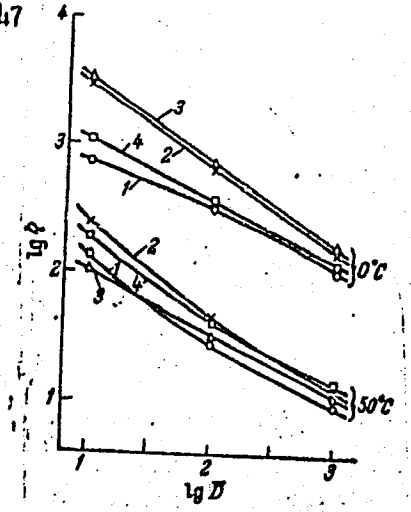

Fig. 1. Viscosity characteristics of synthetic complex calcium greases derived from synthetic fatty acid fraction. 1 - C_{10} - C_{16}; 2 - C_{17} - C_{20}; 3 - larger than C_{21}; 4 - C_{10} - C_{20}. η - viscosity in poise; $\bar{D}$ in revolutions per sec. [Abstracter's note: the meaning of $\bar{D}$ is not made clear. Its units are sec^{-1}]

and high water stability to be useful in various applications up to a temperature of 120--175C and over short periods of time at a temperature of 200C. Orig. art. has: 2 tables and 3 graphs.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 009/ OTH REF: 001

Card 2/2 vmb

L 45937-66 EWT(m)/T DJ/GD

ACC NR: AT6020588 (A) SOURCE CODE: UR/0000/65/000/000/0067/0076

AUTHOR: Ishchuk, Yu. L.; Sinitsyn, V. V.; Prokopchuk, V. A.; Nakonechnaya, M. B.; Man'kovskaya, N. K.; Ishchuk, L. P.; Pobortsev, E. P.

ORG: UkrNIIgipronoft

TITLE: Effect of water concentration and composition of fatty acids on the structure and properties of synthetic greases

SOURCE: Neftepererabotka i neftekhimiya (Petroleum refining and petroleum chemistry). Kiev, Naukova dumka, 1965, 67-76

TOPIC TAGS: fatty acid, grease

ABSTRACT: A series of greases were prepared from the residue of the synthesis of synthetic fatty acids (acid number 103 mg KOH/g), C_5-C_9 acids (280 mg KOH/g), and acid water (248 mg KOH/g); the dispersion medium was a mixture of Z spindle oil and S machine oil. This composition corresponds to that of commercial synthetic grease. It was found that a change in the water content of the greases in the range of 1 to 5% does not affect their volume mechanical properties or structure, indicating that it is desirable to raise the water content of such greases to 4-5%. The structure of hydrated calcium lubricants prepared from soaps of narrow fractions of heat-treated and distilled synthetic fatty acids and their mixtures differs from the structure of fatty and synthetic greases in that it consists of rod-shaped, petal-shaped, and flaky soap

Card 1/2

L 45937-66

ACC NR: AT6020588 O

crystallites. The greatest thickening capacity is displayed by C_{16}-C_{20} acids with an average molecular weight of 286-300 and a purity of the fraction of no less than 90-95%. A wide boiling fraction of C_{13}-C_{22} acids with a purity of no less than 98% is recommended for practical application and for producing high-quality synthetic grease. Orig. art. has: 5 figures and 4 tables.

SUB CODE: 11/ SUBM DATE: 01Dec65/ ORIG REF: 007

LS

Card 2/2

TROYAN, G.A., NAKONECHNAYA, N.I.

Sensitivity of microflora of the fauces in children with rheumatic fever and chronic tonsillitis [with summary in English]. Pediatriia 36 no.7:43-46 Je '58 (MIRA 11:7)

1. Iz kafedry mikrobiologii (zav. dots. I.I. Rybas) i kliniki pediatrii (zav. dots. P.N. Gudzenko) Chernovitskogo meditsinskogo instituta.
(RHEUMATIC FEVER, ther.
antibiotics, sensitivity of microflora of pharynx (Rus))
(TONSILLITIS, ther.
same (Rus))
(PHARYNX, microbiol.
in rheum. fever & tonsillitis, sensitivity to antibiotics (Rus))
(ANTIBIOTICS, ther. use.
tonsillitis & rheum. fever, sensitivity of pharyngeal flora (Rus))

NAKONECHNAYA, N. I., Cand Med Sci (diss) -- "Rheumatism among children in Bukovina". Chernovtsy, 1960. 16 pp (L'vov State Med Inst), 200 copies (KL, No 14, 1960, 138)

NAKONECHNAYA, YA. YA.

PALFIY, F.Yu., kand.biol.nauk; PERVAK, Ya.I., kand.sel'skokhozyaystvennykh nauk; NAKONECHNAYA, Ya.Ya., laborant.

New developments in studying the variation of butterfat percentage in cows. Zhivotnovodstvo 19 no.12:40-42 D '57. (MIRA 10:12)

1.Nauchno-issledovatel'skiy institut zemledeliya i zhivotnovodstva zapadnykh rayonov USSR.
(Cows--Feeding and feeding stuffs)
(Milk)

L 13825-66 EWT(m)/EPF(n)-2/EWP(t)/EWP(b) IJP(c) ES/JD/WW/JG
ACC NR: AP6001793 (N) SOURCE CODE: UR/0089/65/019/006/0521/0523

AUTHOR: Pavlinov, L. V.; Nakonechnikov, A. I.; Bykov, V. N.

ORG: none

TITLE: Uranium diffusion in molybdenum, niobium, zirconium, and titanium

SOURCE: Atomnaya energiya, v. 19, no, 6, 1965, 521-523

TOPIC TAGS: uranium metal, temperature dependence, molybdenum, niobium, zirconium, titanium, metal diffusion, crystal lattice defect

ABSTRACT: Uranium diffusion in Mo, Nb, Zr, and Ti has been investigated. Diffusion coefficients were determined by measuring the integral activity of the residue using the α-radiation of uranium enriched up to 90% by U^{235}. Readings were taken at 1500 — 2000C (Mo and Nb) and 915 — 1200C (Zr and Ti). The temperature dependence of the diffusion coefficient is described by the equations

$$D^{U}_{Mo} = 7{,}60 \cdot 10^{3} \exp(-76\,400/RT) \text{ cm}^2/\text{sec.}$$
$$D^{U}_{Nb} = 8{,}90 \cdot 10^{-2} \exp(-76\,800/RT) \text{ cm}^2/\text{sec.}$$
$$D^{U}_{Zr} = 7{,}77 \cdot 10^{-5} \exp(-25\,800/RT) \text{ cm}^2/\text{sec.}$$
$$D^{U}_{Ti} = 4{,}00 \cdot 10^{-4} \exp(-29\,300/RT) \text{ cm}^2/\text{sec.}$$

Card 1/2 UDC: 621.039.542/548.526

L 13825-66

ACC-NR: AP6001793

Substantial differences between the diffusion mobility and activation energies of Mo and Nb on the one side and Zr and Ti on the other are most probably caused by crystalline lattice defects, such as the excess vacancies appearing in Ir and Ti during polymorphous transitions. Orig. art. has: 1 formula, 2 figures, and 2 tables.

SUB CODE: 11, 20 / SUBM DATE: 02Apr65 / ORIG REF: 007 / OTH REF: 006

Card 2/2

ACC NR: AP6033050 SOURCE CODE: UR/0126/66/022/002/0234/0238

AUTHOR: Nakonechnikov, A. I.; Pavlinov, L. V.; Bykov, V. N.

ORG: none

TITLE: Carbon diffusion into refractory metals with a bcc lattice

SOURCE: Fizika i metallov i metallovedeniye, v. 22, no. 2, 1966, 234-238

TOPIC TAGS: refractory metal, molybdenum, niobium, tungsten, tantalum, titanium, diffusion, carbon diffusion, diffusion coefficient, activation energy, frequency factor

ABSTRACT: Specimens of 99.98%-pure molybdenum, 99.14%-pure niobium, 99.51%-pure tungsten, 99.01%-pure tantalum, annealed at 1500C, and 99.62%-pure titanium, annealed at 1000C, were coated with a uniform thin layer of C-14 radioactive carbon and, after stacking into pairs with the active sides facing each other, were diffusion annealed in a vacuum of $(3—5)\cdot10^{-5}$ mm Hg at 1100—1600C. The diffusion coefficient and activation energy were determined with an accuracy of about 12 and 5%, respectively. With increasing annealing temperature from 1200 to 1600C, the diffusion coefficient increased from $1.34\cdot10^{-8}$ to $4.24\cdot10^{-7}$ cm^2/sec for molybdenum, from $8.61\cdot10^{-10}$ to $5.15\cdot10^{-8}$ cm^2/sec

Card 1/2 UDC: 539.292:548.4

ACC NR: AP6033050

for tungsten, and from $1.05 \cdot 10^{-8}$ to $2.51 \cdot 10^{-7}$ cm^2/sec for tantalum. For niobium and titanium, diffusion annealed in the 1100—1400C range, the diffusion coefficient varied from $2.49 \cdot 10^{-6}$ to $4.68 \cdot 10^{-7}$ cm^2/sec and from $1.75 \cdot 10^{-6}$ to $7.27 \cdot 10^{-6}$ cm^2/sec, respectively. In the same temperature ranges, the calculated values of the activation energy were 53500, 43000, 41000, 35000, and 20000 cal/g·atom for W, Ta, Mo, Nb and Ti, respectively. Thus, the activation energy for carbon diffusion into metals with a bcc lattice is directly proportional to the melting temperature of the base metal, and can be expressed by the equation $\Delta H = kT_{mel}$, where $K \approx 10—13$. The frequency factor for the carbon diffusion into the bcc metals is, to a great extent, determined by the activation energy, and can be expressed by the equation $D_0 = A \exp(b\Delta H)$, where $A = 3.2 \cdot 10^{-4}$ cm^2/sec and $b = 10^{-4}$ cal/g·atom. Orig. art. has: 4 figures, 2 tables, and 10 formulas.

SUB CODE: 11/ SUBM DATE: 03Dec65/ ORIG REF: 007/ OTH REF: 005

Card 2/2

NAKONECHNYY, [illegible]

5

USSR

535.338.333

4521. Theoretical determination of the isotope shift in the spectrum of the carbon atom. A. P. YUTSIS, A. S. NAKONECHNYĬ AND G. K. TSYUNAITIS. *Zh. éksper. teor. Fiz.*, 25, *No.* 6(12), 683–7 (1953) In Russian.

An expression is derived for the specific shift for the configuration $1s^2 2s^2 2p^k 3s^{2-k}$ ($k = 1,2$) for the C atom, in the 2-configurational approximation $1s^2 2s^2 2p^k 3s^{2-k} - 1s^2 2p^{k+1} 3s^{1-k}$. With the aid of one-electron self-consistent Hartree wave-functions the isotope shift for the transition $1s^2 2s^2 2p 3s - 1s^2 2s^2 2p^3$ is calculated both in the 1- and 2-configurational approximations. The shift is smaller in the latter case, the decrease for the $^1P - {}^1S$ transition being about 10 times greater than for $^1P - {}^1D$ or $^1P - {}^3P$. The experimental value for $^1P - {}^1S$ lies between the 1- and 2-configurational approximations, several times nearer the latter.

W. J. ŚWIĄTECKI

SHOYKHET, M.I.; CHERNYY, V.A.; NAKONECHNYY, B.I.

Determining the active acidity in fermentation industries at the control level. Spirt. prom. 27 no.6:44 '61. (MIRA 14:9)
(Fermentation--Equipment and supplies)

NAKONECHNYY, I.I.; AVDEYEV, N.Ye.

Designs for infinitely variable transmissions for grain combines. Sel'khozmashina no.7:16-17 Jl '57. (MLRA 10:8)

1.Moskovskiy institut mekhanizatsii i elektrifikatsii sel'skogo khozyaystva.

(Combines (Agricultural machinery))
(Power transmission)

NAKONECHNYY, I.I., inzh.

Effectiveness of stepless speed regulation in self-propelled grain combines. Trakt. i sel'khozmash. 31 no.1:24-28 Ja '61. (MIRA 14:1)

(Combines (Agricultural machinery))

NAKONECHNYJ, I.I.;[Nakonechnyy, I.I.]; AVGYEJEV, N.B. [Avdeyev, N.B.]; SITKEI, Gyorgy [translator];

Designing harvester-thresher variators. Jarmu mezo gep 5 no.2:58-3 of cover Ap '58.

1. Moskovskiy institut mekhanizatsii i elektrifikatsii sel'skogo khozyaystva (for Nakonechnyy, Avdeyev).

NAKONECHNYY, M.I.

Shortcomings of standards for raw sheepskins to be processed in fur and fur coat manufacture. Kozh.-obuv.prom. no.7:22-23 Jl '59. (MIRA 12:11)

(Hides and skins)

NAKONECHNYY, Mikhail Ivanovich; LUKASHEV, N.I., red.

[Primary processing of the skins of fur-bearing animals raised in pens; work experiences of the cooperative fur farms of Omsk Province] Pervichnaia obrabotka shkurok pushnykh zverei kletochnogo soderzhaniia; iz opyta raboty koopzveropromkhozov Omskoi oblasti. Moskva, Ekonomika, 1964. 39 p. (MIRA 17:10)

KHAN, B.Kh.; NAKONECHNYY, N.F.

Investigating the properties of stainless chromium-manganese steels. Vop. proizv.stali no.6:41-48 '58. (MIRA 12:3)
(Steel, Stainless--Testing)

18.7100

S/148/60/000/006/002/010

AUTHORS: Nakonechnyy, N. F., Khan, B. Kh.

TITLE: Nitriding of Manganese Metal in Ammonia Gas

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Chernaya metallurgiya, 1960, No. 6, pp. 68-76

TEXT: To determine conditions of manganese nitriding in ammonia gas the authors carried out laboratory tests with standard Mp-1 (Mr-1) and Mp-2 (Mr-2) manganese metal containing 96.5- 97.0% Mn. Nitriding was performed at 600, 650, 700, 800, 850 and 900°C, on an installation shown in Figure 1. After nitriding the nitrogen content in manganese was determined from the increase in the nitrogen weight. The following phenomena were studied and are illustrated by graphs: the dependence of increase in the nitrogen weight on the temperature (Figure 2); the increase in the nitrogen weight depending on the temperature of manganese nitriding in dissociated ammonia (Figure 3); changes in the nitrogen and hydrogen content in the reactor depending on NH_3 consumption and temperature (Figure 4); changes in the hydrogen and nitrogen content at various temperatures in the presence of manganese depending on ammonia consumption and nitriding temperature (Figure 5); the degree of ammonia dissociation under the effect

of manganese, depending on the temperature and the NH_3 consumption (Figure 6); changes in the increase of nitrogen of nitrogen weight depending on ammonia consumption at different temperatures (Figure 7); the dependence of the increase in the nitrogen weight on time (Figures 8 and 9); the dependence on the degree of nitriding on the dimensions of Mn particles (Figure 10). The data obtained were used to establish the following optimum conditions for nitriding of manganese, intended for experimental steel melting. Optimum temperature is 700-750°C; Mn fraction is 0.5-0.3 mm; ammonia consumption is 25-30 cm^3/min per 1 g Mn; the height of the Mn layer must not exceed 10 mm for batches of 150-200 g. To ensure stable results manganese oxidation during nitriding must be prevented by protecting the reaction space against the access of humidity and oxygen. The average increse in the nitrogen weight is about 2% per hour. Nitriding of manganese in a fluidized bed proceeds much faster. Nitriding time is 5 minutes at 750-800°C; dimensions of fractions are 0.9-0.5 mm; the nitrogen content in the manganese attains 10-11%; specific ammonia consumption is 100-150 cm^3/minute; it is determined by the fluidizing of manganese on the reactor grid. There are: 1 diagram, 9 graphs, 1 table and 9 references: 6 Soviet and 3 English.

ASSOCIATION: Kiyevskiy politekhnicheskiy institut (Kiyev Polytechnic Institute)
SUBMITTED: August 4, 1959.

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S/137/61/000/012/018/149
A006/A101

AUTHORS: Osipov, V. P., Lisov, I. V., Nakonechnyy, N. F.

TITLE: Teeming of high-alloy steel grades under flux

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 12, 1961, 56, abstract 12V339 (V sb. "Vopr. proiz-va stali", no. 8, Kiyev, AN UkrSSR, 1961, 88-- 95)

TEXT: Experiments on the use of synthetic slags during teeming, were made with X23H18 (Kh23N18), 1X18H9T (1Kh18N9T), 0X18H9T (0Kh18N9T), and X18H12M3T (Kh18N12M3T) steels melted in a 20-ton electric furnace. The metal was cast through 2 syphons in 4.1-ton ingots. For comparison the ingots of syphon 1 were cast by conventional technology into molds greased with varnish and with the use of wood frames; ingots of bottom plate 2 were cast under synthetic slag into ungreased molds. Liquid synthetic slag (15 - 16 kg) was poured into the mold on the open metal surface during its ascent in the mold to 150 - 200 mm height. Synthetic slags (melted in a single-phase arc furnace with a conducting bottom) of 2 groups were employed: 1) silicon-free fluxes containing in %: Na_3AlF_6 20 - 80; CaF_2 35 - 60, NaF 70, CaO 20 - 30, and 2) fluxes with SiO_2

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Teeming of high-alloy steel grades under flux

20 - 50% and Al_2O_3 5 - 15% and with admixture of CaO, CaF_2, MnO, MgO, Na_3AlF_6 and NaF. The former did slightly affect the formation of the crust and their use is difficult due to the considerable liberation of F-vapors. When testing the latter, good results were obtained during teeming with the use of flux containing in %: SiO_2 28 - 30; CaO 10. - 15; CaF_2 40 - 45; Al_2O_3 10 - 15. In this slag Cr and Ti oxides are sufficiently well diffused. Ingots cast under this flux did not show turnings of the crust. The surface quality of ingots and rolled metal was considerably improved. The amount of defects on ingots cast under flux was 1.7 - 2. 1 times less than on conventional ingots.

P. A.

[Abstracter's note: Complete translation]

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L 15577-63 EWP(q)/EWT(m)/BDS AFFTC/ASD JD/JG 63

ACCESSION NR: AT3002167 S/2921/63/000/009/0051/0064

AUTHORS: Prokhorenko, K. K.; Svistunov, A. M. (deceased); Vvedenskiy, V. S.; Verkhovtsev, E. V.; Yemel'yanenko, Yu. G.; Nakonechnyy, N. F.; Pastukhov, V. N.

TITLE: Technological improvements in melting and pouring of stainless steel 19 76

SOURCE: AN Ukr RSR. Viddil tekhnichnykh nauk. Voprosy* proizvodstva stali, no. 9, 1963, 51-64

TOPIC TAGS: stainless steel, technological improvement, melting, pouring

ABSTRACT: The old methods of melting and pouring steel are criticized. New procedures used in both processes and the results obtained are described and discussed. The furnace charge used in the improved method of melting consisted of 30-70% scrap steel (stainless carbon steel low in P and carbon ferrochrom.). The total content of C, Cr, and Si in the charge was 0.3-0.5%, 17-19%, and 0.4% respectively. Oxygen was blown in under a pressure of 15 atm., after which the metal temperature was raised to 1850-1880C. As a result, the carbon content was lowered to 0.05% and that of Cr to 12.9%. The slag formed was fluid, homogeneous, and contained 48.6% Cr_2O_3. The amount of silicochrome, which was introduced at the end of blowing, was calculated in such a way that the metal contained 3% Si and

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1.5% of lime by weight of metal. After 10 minutes 15% (wt) of blooms were introduced for the cooling purposes. The new method provides for the melting of stainless steel containing a minimum of 0.06% carbon by using carbon ferrochrome or a 100% high-chromium scrap (without the use of carbon-free ferrochrome). The improved method of pouring is based on the formation of a slag layer on the open surface of the ingot, preventing metal oxidation in the ingot. Moreover, the liquid slag solidifies on the ingot walls, thus serving as a lubricant that protects the walls. It also dissolves floating nonmetallic inclusions and prevents formation of a coarse crust on the ingot surface by moderating the surface cooling of the metal. Orig. art. has: 4 tables and 4 figures.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 10May63 ENCL: 00

SUB CODE: ML NO REF SOV: 004 OTHER: 001

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L 2h71h-65 EWT(m)/EWA(d)/EWP(t)/EWP(b) IJP(c)/ASD(f)-3/ASD(m)-3/AFMDC MJW/JD/JG

ACCESSION NR: AR5000603 S/0137/64/000/008/I069/I069

SOURCE: Ref. zh. Metallurgiya. Sv. t., Abs. 8I442

AUTHOR: Nakonechnyy, N. F.; Prokhorenko, K. K.; Zhdanov, P. L.

TITLE: Increasing the ductility of stainless steels using rare earth elements

CITED SOURCE: Metallurg. i gornorudn. prom-st'. Inform. nauchno-tekhn. sb., no. 1(25), 1964, 32-33

TOPIC TAGS: cerium containing alloy, rare earth containing alloy, metal ductility, stainless steel/ steel 10Kh16N25N13, steel 07Kh25N13, steel 10Kh16N25M6, steel 07Kh25N13

TRANSLATION: The possibility of increasing the ductility of steels 10Kh16N25M6 and 07Kh25N13 by the introduction of cerium has been studied. The ductility of cast metal test samples was tested by hammer forging, a bending test, and by rolling ingots weighing 0.7 tons in a blooming mill, while the ductility of a deformed sample was determined by a short term elongation test at 1000-1250°. With the

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L 24714-65
ACCESSION NR: AR5000603

introduction of an optimum (0.1-0.2%) amount of cerium into deformed steel 10Kh16N25N13, an increase of 25-35% was obtained in δ and ψ, while in steel 07Kh25N13 only ψ increased. An increase of 9% in yield of usable metal was achieved in rolling industrial ingots, into which a calculated 0.2% of cerium had been introduced before tapping or into the ladle before pouring the metal.

SUB CODE: MM ENCL: 00

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L 15576-63 EWP(q)/EWT(m)/BDS AFFTC/ASD JD

ACCESSION NR: AT3002168 S/2921/63/000/009/0065/0072

55

AUTHOR: Nakonechny*y, N. F.

TITLE: Influence of secondary oxidation produced during casting on the plasticity of stainless austenitic steels in rolling

SOURCE: AN Ukr RSR. Viddil tekhnichnykh nauk. Voprosy* proizvodstva stali, no. 9, 1963, 65-72

TOPIC TAGS: stainless steel, austenitic steel, plasticity, rolling, casting, secondary oxidation

ABSTRACT: Experimental results obtained in a number of steel works on the plasticity of stainless steel cast in two different ways (with and without liquid slag) are discussed. Judging from these results, the pouring of steel without separation of the liquid slag makes the metal more plastic in rolling. It was established that the chemical composition of steel remained the same in both cases and that no sharp difference in the content of nonmetallic inclusions was noticed. The increase in plasticity was explained by the decrease in the number of nonmetallic scabs and inclusions in the crustal layer of the ingot. An additional advantage of the method is that the liquid slag alleviates the harmful effect of secondary

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