On an approximation method for the ...   S/044/62/000/003/057/092
                                          C111/C444

$$-\frac{1}{2}\frac{d^2\tilde{R}}{dr^2} + \tilde{V}(r)\tilde{R} = \tilde{E}\tilde{R}$$

are known and sufficiently simple functions. The parameters λ_i are chosen such that the potentials V and $\tilde{V}$ only slightly differ from each other on the interval where $\tilde{R}(r)$ is essentially different from zero; e.g. from the condition that the functional

$$\tilde{F}(\lambda_1, \ldots, \lambda_s) = \int_0^\infty \left[V(r) - \tilde{V}(r, \lambda_1, \ldots, \lambda_s) \right]^2 \tilde{R}^2(r) \, dr$$

becomes a minimum.

One points to the fact that this method has been tested by a large number of examples; two examples are given.

[Abstracter's note: Complete translation.]

Card 2/2

16,3400   25705   S/020/61/138/005/004/025
                                     C111/C222

AUTHOR:·   Uvarov, V. B.

TITLE: Bond of two spectral functions corresponding to a single
           second-order differential equation and to different initial
           conditions

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 138, no. 5, 1961, 1035-1038

TEXT: Given the equation

$$Ly + \lambda y = y'' + \{\lambda - q(x)\} y = 0,\tag{1}$$

where $q(x)$ is summable on every finite interval. Let $\varphi_\alpha(x, \lambda)$ be a
solution of (1) satisfying

$$\psi_\alpha(0, \lambda) = \cos \alpha, \quad \psi'_\alpha(0, \lambda) = \sin \alpha\tag{2}$$

$$\varphi_\alpha(b, \lambda)\sin\beta + \varphi'_\alpha(b, \lambda)\cos\beta = 0.\tag{3}$$

Let $\zeta_{\alpha, b}(\lambda)$ be the spectral functions of the problem of Sturm-Liouville
which correspond to (1)-(2)-(3). The author investigates the connection
between the spectral functions for different α-values (for the same
(1) and (3)). Let

$$m_\alpha(b, z) = \int_{-\infty}^{\infty} \frac{d\,\zeta_{\alpha, b}(\lambda)}{z - \lambda}.$$

Card 1/2

Bond of two spectral functions...   S/020/61/138/005/004/025
                                          C111/C222

If then $\alpha_1 \neq \frac{\pi}{2}$, $\alpha_2 \neq \frac{\pi}{2}$, then it holds

$$m_{\alpha_2}(b,z) = \frac{\cos^2 \alpha_1 \cdot m_{\alpha_1}(b,z)}{\cos \alpha_2 [m_{\alpha_1}(b,z)\cos \alpha_1 \sin(\alpha_1 - \alpha_2) + \cos \alpha_2]}, \qquad (18)$$

If $\alpha_2 = \frac{\pi}{2}$ then it holds

$$\bar{m}_{\pi/2}(b,z) = \frac{1}{(1-z)\cos^2 \alpha_1} \left\{ \frac{1+iz}{2m_{\alpha_1}(b,-i)} + \frac{1-iz}{2m_{\alpha_1}(b,i)} - \frac{1}{m_{\alpha_1}(b,z)} \right\}, \quad (20)$$

where $\bar{m}$ is defined by $\bar{m}_{\alpha_2}(b,z) = \int_{-\infty}^{\infty} \frac{d\rho_{\alpha_2,b}(\lambda)}{(\lambda^2+1)(z-\lambda)}$.

There are 3 Soviet-bloc references.

PRESENTED: January 31, 1961, by M.V.Keldysh, Academician
SUBMITTED: January 6, 1961

Card 2/2

NIKIFOROV, A.F.; UVAROV, V.B.; LEVITAN, Yu.L.; SAMARSKIY, A.A., prof.,
    otv. red.; ORLOVA, I.A., red.; POPOVA, N.S., tekhn. red.

    [Tables of Racah coefficients] Tablitsy koeffitsientov Raka.
    Moskva, Vychislitel'niy tsentr AN SSSR, 1962. 319 p.
                        (Quantum theory)   (MIRA 15:5)

STOLYARENKO, Vasiliy Pavlovich; UVAROV, V.D., dots., vidp. red.; GOLOVNYAK,
    L.P., red.; KHOKHANOVSKAYA, T.I. [Khokhanovs'ka, T.I.], tekhn. red.

[Socialist transformation of agriculture in Volyn' Province, 1944-1950]
Sotsialistychne peretvorennia sil's'koho hospodarstva na Volyni,
1944-1955 rr. [Kyiv] Vyd-vo Kyivs'koho derzh. univ., 1958. 108 p.
    (Volyn' Province—Agriculture)   (MIRA 11:9)

UVAROV, V. G.

"Experiments in the Treatment of Brucellosis of Sheep"
Tr. In-ta Veterinarii Kazakhsk, Fil, VASKhNIL, No 6, 1954, 109-116

By hperimmunization of a sheep with antigens obtained from organs
of health y animals, an antireticular cytotoxic serum (ATsS) was procured.
After preliminary threefold subcutaneous administration of the ATsS
serum in doses of 0.01 - 0.03 ml/10 kg, "ammagren: xixhh alcohol extract of
onion (Fytoncyde), and nicotinic acid were given intravenously. During
the use of all these substances, particularly nicotinic acid , therapeutic
effects were noticeable. However, the very best results were obtained
from the specific serum ATsS. (RShBiol, No 9, May 1955)

SO: Sum-No 787, 12 Jan 56

SUKHOTIN, S.G. (Moskva); UVAROV, V.G. (Moskva); SHAPOVALOVA, O.K. (Moskva)

Contactless pulse-frequency telemetering device using transistors.
Avtom. i telem. 23 no.3:413-416 Mr '62.   (MIRA 15:3)
(Telemetering—Equipment and supplies)

35458
S/103/62/023/003/016/016
D201/D301

9.8200 (1482)

AUTHORS: Sukhotni, S.G., Uvarov, V.G., and Shapovalova, O.K.
              (Moscow)

TITLE: Contactless semiconductor pulse-frequency telemeter-
              ing device

PERIODICAL: Avtomatika i telemekhanika, v. 23, no. 3, 1962,
              413 - 416

TEXT: The authors describe the principle of operation and the cir-
cuits of a semiconductor pulse-frequency telemetering device de-
veloped at the TsLEM Mosenergo and in continuous use since 1959.
It consists of a transmitter and receiver. The transmitter ЧИС - Д
-2 (ChIS-D-2) transforms the d.c. pick-up current, proportional to
the original measured quantity (voltage, current, power etc.) into
a repetition of pulses suitable for transmission. It consists of
series connected magnetic null-circuit, a two-stage transistorized
amplifier, phasing circuit, a d.c. to frequency converter, output
stage and a compensating feedback loop with frequency-to-d.c. con-
verter. Its characteristics are as follows: 1) Minimum input cur-
Card 1/2

Contactless semiconductor pulse- ...

S/103/62/023/003/016/016
D201/D301

rent 150 uA, R_{in} = 300 - 500 ohms, P_{in} = 10^{-5} W. 2) Frequency ran-
ge 4 - 20 pulses/sec. Zero frequency transmitted at 4 pulses/sec.
3) Non-linearity ± 1 %; 4) Stability 4 %. 5) Error for ± 30 % supp-
ly voltage change less than ± 1.5 %; 6) Overall error for ± 10 %
change in temperature less than ± 1.12 %, for ± 20 % temperature
change less than ± 1.62 %; 7) Error due to mains frequency changes
46 - 52 c/s less than 1 %. 8) Response time 0.4 sec. 9) Power con-
sumption 5 W. The receiver type ЧИС - П -2 (ChIS-P-2) transforms the
pulse frequency into d.c. current. It consists of a frequency me-
ter and a meter calibrated in units of the measured parameter. The
frequency meter is a condenser-type frequency to d.c. converter.
Its characteristics are as follows: 1) Frequency range 4 - 20 pul-
ses/sec. 2) Input signal level 2.5 V. 3) Input impedance 1 kiloohm.
4) Output current 1.0 mA (at max. frequency). 5) Non-linearity of
output characteristic ± 0.5 %. 6) Error, due to the supply and sig-
nal voltage varying by ± 15 %, less than ± 1 %. 7) Temperature er-
ror less than ± 1 % for ΔT = ± 20°C. 8) The receiver allows for a
30 % change in the mark-to-space ratio of the input signal. There
are 4 figures and 5 Soviet-bloc references.
SUBMITTED: November 13, 1961
Card 2/2

L 47456-66   EW( )/EWT(m)/EWP(v)/T/EWP(k)/EWP(h)/EWP(1)   DJ

INVENTOR: Sadovnikov, V. V.; Musin, E. I.; Uvarov, V. G.; Kostyuk, I. Ye.

ORG: none

TITLE: A device for the manual and automatic coupling and uncoupling of hydraulic systems.   Class 72, No. 185241

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 16, 1966, 149

TOPIC TAGS: hydraulic equipment, auxiliary aircraft equipment, valve

ABSTRACT: This Author Certificate introduces a device for the manual and automatic coupling and uncoupling of hydraulic systems such as those found in aircraft. It consists of outer and inner half-joints. The outer half-joint contains a nipple joint and a floating frame with a movable valve seat and a spring. The inner half-joint includes a fixed frame with a valve inside. For easier separation and smoother operation, without any lateral displacements when coupled, the movable valve of the inner half-joint has a channel connection with the outside atmosphere, and the floating frame of the outer half-joint has hinged spring-supported rods. The rods include a tooth for tripping onto the valve guide shoulder of the inner half-joint; and the nipple joint has a rigidly mounted compensating gear with a screwed-on bushing which contains a contoured projection to activate the rods during separation. [SA]

Orig. art. has: 1 figure.
SUB CODE: 13, 01/ SUBM DATE: 19Mar65   UDC: 623.419; 621.643
Card   1/1

UVAPOV, V.I.

UVAPOV, V.I.: "Some problems in improving casting Bessemer rail steel".
Dnepropetrovsk, 1955. Min Higher Education Ukrainian SSR. Dnepropetrovsk
Order of Labor Red Banner Metallurgical Inst imeni I.V. Stalin. (Dissertations
for the Degree of Candidate of Technical Sciences).

SO: Knizhnaya letopis' No 45, 5 November 1955. Moscow.

UVAROV, Vladimir Il'ich, kand.tekhn.nauk; NOROVSKIY, Konstantin Ivanovich,
kand. fiziko-matem. nauk; KAGAN, T.B., red.; TIMOSHEVSKAYA, A.A.,
tekhn. red.

[The future belongs to powder metallurgy] Budushchee za
poroshkovoi metallurgiei. Stalino, Knizhnoe izd-vo Stalino-
Donbass, 1960.   53 p.   (MIRA 16:6)
        (Powder metallurgy)

L 57128-65   EWT(d)/EWP(e)/EWT(m)/EWA(d)/EWP(v)/EWP(t)/EWP(k)/EWP(h)/EWP(z)/EWP(b)/
ACCESSION NR: AP5018760   EWP(l)   Pf-4   JD   UR/0304/64/000/004/0068/0069

AUTHOR: Litovchenko, N. I. (Engineer); Dobrovol'skiy, G. G.(Engineer); Uvarov, V.I.
(Engineer); Vas'kovskiy, V. S.(Engineer); Viktorov, G. V.(Engineer)

TITLE: Production of magnetically soft materials using powder metallurgy

SOURCE: Mashinostroyeniye, no. 4, 1964, 68-69

TOPIC TAGS: powder metallurgy, mechanical engineering

ABSTRACT: At the "Elektroismeritel'" plant in Zhitomir, which makes electrical
measuring instruments of type Ts-57, the magnetic circuits employed are made of
Armco steel. In the manufacture of "ring" parts from this steel, 80% of the
material is wasted in the form of shavings, and the process is labor consuming.
     Experimental investigations were made by the Technical Planning and
Design Institute of the Kiev Sovnarkhoz in cooperation with the Brovary Powder
Metallurgy Plant with the aim of adopting a powder metallurgy process for the
production of "ring" parts.

Card 1/2

L 57128-65
ACCESSION NR: AP5018760

The powder material used, pressing, sintering, and post-pressing operations are described. Dimensions of the parts are given, and their various physical and magnetic properties are listed. Advantages of the powder method over the ordinary process amount to an annual saving of 9,300 rubles.

ASSOCIATION: none

SUBMITTED: 00   ENCL: 00   SUB CODE: MM, IE

NR REF SOV: 000   OTHER: 000   JPRS

Card 2/2

UVAROV, V. M.

PA 64/49T74

USSR/Medicine - Therapeutics   Jan/Feb/Mar 49
        Medicine - Stomatology

"Diathermocoagulation in Stomatology," V. M. Uvarov,
L. Ya. Gots, Chair of Stomatol Nav Med Acad, 4 pp

"Stomatol" No 1

Usual antiseptics (carbolic acid, lysol, antiformin,
etc.) have strong irritating properties and do not
exert enough action on bacterial flora. Using an
electron diathermocoagulator, complete cure was
obtained in 117 out of 120 cases at the stomato-
logical clinic of the First Leningrad Med Inst
in 1938. Apparatus was constructed by L. Ya. Gots.
Objections to use of diathermocoagulation are the
appearance of granuloma and cysts.

                                        64/49T74

UVAROV, Vladimir Mikhaylovich

[Clinical aspects and treatment of odontogenic osteomyelitis of the jaws] Klinika i lechenie odontogennykh osteomielitov cheliu- stey. Leningrad, Medgiz, 1956. 137 p.

(OSTEOMYELITIS)   (JAWS--DISEASES)   (MLRA 9:10)

RUDENKO, Anatoliy Terent'yevich; UVAROV, V.M., red.; KONONOVA, L.B., tekhn. red.; CHUNAYEVA, Z.V., tekhn. red.

[Pathology of the dentition of wisdom teeth]Patologiia prorezyvaniia zubov mudrosti. Leningrad, Medgiz, 1961. 63 p.
(MIRA 15:3)
(DENTITION)

UVAROV, Vladimir Mikhaylovich; TANFIL'YEV, D.Ye., red.; LEBEDEVA,
Z.V., tekhn. red.

[Odontogenic highmoritis] Odontogennye gaimority. Leningrad,
Medgiz, 1962. 72 p. (MIRA 15:3)
(MAXILLARY SINUS—DISEASES)

ZBARZH, Ya.M., prof.; MUKHIN, M.V., prof.; UVAROV, V.M., prof.;
    KABAKOV, B.D., doktor med. nauk; ALEKSANDROV, N.M., dots.;
    KLEMENTOV, A.V., dots.; FIALKOVSKIY, V.V., dots.;
    MUKOVOZOV, I.N., kand. med. nauk; CHUPRINA, Yu.V., kand.
    med. nauk; RYNKEVICH, V.S., red.; LEBEDEVA, G.T., tekhn.red.

[Operative maxillofacial surgery] Operativnaia cheliustno-
litsevaia khirurgiia. Leningrad, Medgiz, 1963. 358 p.
                                       (MIRA 16:12)

    (FACE--SURGERY)   (JAWS--SURGERY) (NECK--SURGERY)

:L 9412-66   EWT(1)   OW

ACC NR: AT5028300   SOURCE CODE: UR/3133/65/000/008/0043/0045

AUTHOR: Uvarov, V. N.

ORG: Kharkov Astronomical Observatory (Khar'kovskiy astronomicheskaya observatoriya)

TITLE: The electrophotometer of the spectrohelioscope of Kharkov astronomical observatory

SOURCE: AN UkrSSR. Mezhduvedomstvennyy geofizicheskiy komitet. Informatsionnyy byulleten'. no. 8, 1965. Geofizika i astronomiya (Geophysics and astronomy), 43-45

TOPIC TAGS: photometer, photometry, solar radiation, optic prism, solar flare, photomultiplier, ammeter, electron tube, semiconductor diode / D 202 semiconductor diode, FEU 27 photomultiplier, M 24 ammeter, 6N1P electron tube, 6N2P electron tube

ABSTRACT: The electronic photometer, built at Kharkov Astronomical Observatory, is placed behind the film holder in the spectrohelioscope. A Yu-3 objective, showing an image in 1:1 scale, is placed behind the prism in a special attachment. The image strikes a mirror disk with a set of diaphragms, one of which is in front of a photomultiplier (see Fig. 1). The set of diaphragms allows measurement of areas of the sun with dimensions from 10" to 5'. An FEU-27 photomultiplier, with good sensitivity in the red region to 8000 Å and low inherent noise, is used as the radiation receiver. The amplitude characteristic of the amplifier (see Fig. 2) in the operating range does not deviate from linear by more than 0.1%. The integrating RC
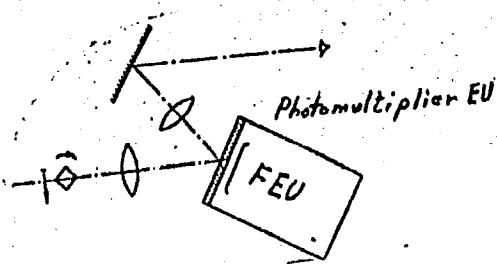
Card 1/2

L, 9412-66
ACC NR: AT5028300

Photomultiplier EU

FEU

Fig. 1. Optical system of attach-
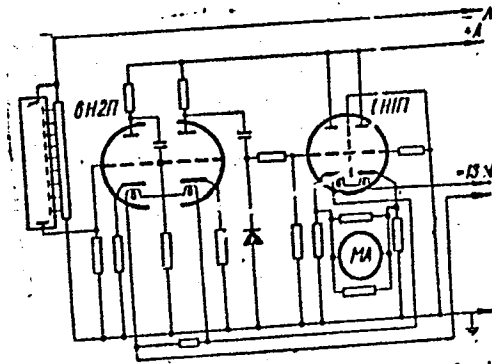ment of electrophotometer.

Fig. 2. Circuit diagram of photo-
meter.

network has a time constant of 0.3 sec. This photometer is simple in design, con-
siderably facilitating and increasing the accuracy of photometric measurement of the
solar surface areas in the line H$_\alpha$, as compared with the photographic method. It
can also be used for measurements in other regions of the spectrum. Orig. art. has:
2 diagrams.

SUB CODE: 03/ SUBM DATE: none.

Card 2/2

IVANOV, V.N.

Concentration of Japanese encephalitis virus by ammonium sulfate.
Vop. virus. 10 no.4:486-488 Jl-Ag '65.   (MIRA 18:8)

1. Institut virusologii imeni D.i. Ivanovskogo AMN SSSR, Moskva.

UVAROV, V.S.,.otv. za vypusk; KOLPAKOV, B.T., otshchiy red.; DEMINA,
red.; MELENT'YEV, A.M., tekhn.red.

[National economy of the R.S.F.S.R. in 1958; statistical
yearbook] Narodnoe khoziaistvo RSFSR v 1958 godu; sta-
ticheskii ezhegodnik. Moskva, Gos.stat.izd-vo, 1959.
507 p.   (MIRA 12:9)

1. Russia (1923- U.S.S.R.) TSentral'noye statisticheskoye
upravleniye. 2. Nachal'nik TSentral'nogo statisticheskogo
upravleniya pri Sovete Ministrov RSFSR (for Kolpakov).
      (Russia--Economic conditions--Yearbooks)

UVAROV, V.S.

Production of ceramic metal parts at the Laptevskiy plant for the manufacture of coal mining machinery. Porosh. met. 1 no.1:99-100 Ja-F '61. (MIRA 15:5)

1. Laptevskiy zavod ugol'nogo mashinostroyeniya.
        (Laptevskiy--Coal mining machinery)
                (Ceramic metals)

PERMITIN, Ye.N., otv. red.; SMIRNOV, N.P., zam. otv. red.; DEBRIN,
        I.I., red.; SMIRNOV, S.V., red.; UVAROV, V.S., red.;
FORMOZOV, A.N., red.; KHOLOSTOV, V.G., red.; SHOLOKHOV,
M.A., red.; NAUMOV, V.V., red.

[Hunting grounds] Okhotnich'i prostory. Moskva, Fizkul'-
tura i sport. Vol.20. 1964. 230 p.   (MIRA 17:8)

GLEMBOTSKIY, V.A.; UVAROV, V.S.; SOLOZHENKIN, P.M.

Some flotation data on celestine. Izv. Otd. geol.-khim. i tekh.
nauk AN Tadzh. SSR No.1: 51-56 '61.   (MIRA 14:9)

1. Institut khimii AN Tadzhikskoy SSR.
                    (Celestite) (Flotation)

GLEMBOTSKIY, V.A.; UVAROV, V.S.; SOLOZHENKIN, P.M.

Studying the effect of some electrolytes on the flotation of celestine by means of various collectors. Izv. Otd. geol.-khim. i tekh. nauk AN Tadzh. SSR No.1:57-62 '61. (MIRA 14:9)

1. Institut khimii AN Tadzhikskoy SSR.
                    (Celestite) (Flotation)

GLEMBOTSKIY, V.A.; UVAROV, V.S.

Mechanism underlying the activating effect of some water-soluble
compounds on the flotation of celestine and anhydrite. Dokl.
AN Tadzh. SSR   6   no.3:25-29   '63.   (MIRA 17:4)

1. Institut khimii AN Tadzhikskoy SSR. Predstavleno chlenom-kor-
respondentom AN Tadzhikskoy SSR V.I.Nikitinym.

GLEMBOTSKIY, V.A.; UVAROV, V.S.

Effect of sodium sulfide on the flotation of celestine and anhydrite. Dokl. AN Tadzh. SSR 6 no.5:24-27 '63. (MIRA 17:4)

1. Institut khimii AN Tadzhikskoy SSR. Predstavleno chlenom-korrespondentom AN Tadzhikskoy SSR V.I.Nikitinym.

UVAROV, Vladimir Vasil'yevich; CHERNOBROVKIN, Aleksoy Petrovich; SHUVALOV,
   G.I., kand. tekhn. nauk, retsenzent; SHAPIRO, M.S., kand. tekhn. nauk,
   red.; DANILOV, L.N., red. izd-va; SOROKINA, G.Ye., tekhn.red.; DOBRI-
TSYNA, R.I., tekhr. red.

[Gas turbines] Gazovye turbiny. Moskva, Gos. nauchno-tekhn. izd-vo
mashinostroit. lit-ry, 1960. 140 p.   (MIRA 14:7)
                          (Gas turbines)

ZAYTSEV, I.A.; KAZAKOV, A.A.; AKOL'TSEV, Ye.D.; UVAROV, V.V.

Production of St.5ps semikilled steel for helical rib bars.
Metallurg 7 no.7:20-21 Jl '62.   (MIRA 15:7)
                                (Steel—Metallurgy)

30234

S/145/60/000/002/001/020
D221/D302

26.2120

AUTHOR: Uvarov, V.V., Doctor of Technical Sciences, Professor

TITLE: Possible paths in the development of gas turbine design

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Mashino-
              stroyeniye, no. 2, 1960, 3 - 18

TEXT: The author deduces a coefficient of efficiency of the total
cycle with respect to the number of intermediate coolers and com-
bustion chambers. It is a function of three parameters which are
independent in the case of a single shaft unit. An involved expres-
sion is obtained for multi-shaft arrangements. The work capacity of
1 kg of gas h_g is then obtained. Calculations are made by gradual
trial and error method. Data of Brown-Boveri indicate a drop of η
with fall of load without regeneration, and this is improved with
larger σ. Comparison of curves reveals some advantage for installa-
tion with regenerator, although it complicates the arrangement.
The coefficient of efficiency can be improved by other means, and

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30234
S/145/60/000/002/001/010
D221/D302

Possible paths in the development ...

in particular by a simultaneous introduction of coolers and inter-
mediate superheaters. Regenerators are, however, less reliable
than coolers. Ratio of pressure increment π_k is different for ca-
ses with or without regeneration. It is evident that in some instan-
ces it is expedient to use part of the area for coolers and opera-
te with a smaller degree of regeneration. This results in a rise
of π_k which corresponds to larger number of stages in compressor
and turbine. When $\sigma = 0$, then optimum π_k of the last cascade is
greater than π_k of first cascades, and reaches 12-15 which repre-
sents difficulties. Large π_k in axial compressors cause high losses
in no-load run. Due to above, the Kafedra "Turbostroyeniya" MVTU
(Department of Turbine Construction, MVTU) carried out design work
on high pressure compressors based on the turbine compressor. The
arrangement of an axial turbine compressor is given. It has five
stages, where air is preliminarily compressed. The turbine compres-
sor receives this air and brings it to required pressure. Triangles
of speeds reveal that the work of the turbine decreases with smal-
ler air flow. When the speed of the impeller is constant, then drop

Card 2/5

30234
S/145/60/000/002/001/020
D221/D302

Possible paths in the development ...

of air flow through the axial turbine compressor would reduce the speed of the axial compressor, and therefore, of the air turbine as well. The working point on the curve of the axial compressor will then move almost horizontally. This can be modified by choice of a different ratio between air turbine and impeller. The authors deduces equations for coefficients of efficiency of diffusor without blades and the impeller. In the system of axial turbine compressor, the centrifugal group operates in more favorable conditions due to higher temperature at the inlet. If cooling is introduced after the axial compressor, the η_x of the centrifugal group will be higher than in axial section, which is to its advantage. In calculating the coefficient of efficiency, a small angle of impact at the outlet of radial rotor is assumed in order to reduce friction of disc. The Kafedra "Gazovyye i parovyye turbiny", MVTU (Department of Gas and Steam Turbines, MVTU) carried out research in this direction. A set with closed cycle for atom power installation is illustrated and described. This is followd by a scheme of aviation equipment, and a 200 MWT gas turbine unit which includes two coolers, two intermediate burners and is designed for natural gas operation. The

Card 4/5

30234

Possible paths in the development ...

planned temperature $t_3 = 1140^\circ C$ is experimental, and the possibili-
ty of introducing it in practice is an involved, although interes-
ting problem, as the steam turbine ПBK (PVK)-200 of the Leningrad
Metallurgical Factory has a combined coefficient of efficiency of
56 - 37 % and takes up 2 - 2.5 times more space. Lowering the above
temperature to 700-730°C would reduce the economy of the gas tur-
bine to 56 - 37 %, and make the size of the last stage comparable
to that of the PVK-200, but with one flow instead of two, as in the
case of PVK-200, for the same output. Four basic paths are possible
in developing gas turbines. First, by improving the cooling of its
working elements, and shifting to higher temperatures t_3, and large
Π_x. Second, transfer to intermediate cooling and simultaneous in-
troduction of intermediate burning. Third, improving the hydraulics
of machines. Fourth, research on rational forms of heat exchangers.
In the case of small power gas turbines, the use of regeneration is
possible. Radial machines with multiple cooling and burners can be
expected to find applications in atomic power installations. There
are 10 figures, 4 tables and 5 references: 2 Soviet-bloc and 3 non-

Card 4/5

30234
S/145/60/000/002/001/020
Possible paths in the development ...   D221/D302

Soviet-bloc. The reference to the English-language publication reads as follows: Atomics. E., Nuclear Energy, March, 1957, 86-92.

ASSOCIATION: MVTU im. Baumana (MVTU im. Bauman)

SUBMITTED: December 15, 1959

Card 5/5

UVAROV, Vladimir Vasil'yevich; BEKNEV, Viktor Sergeyevich; GRYAZNOV,
Nikolay Dmitriyevich; MIKHAL'TSEV, Vsevolod Yevgen'yevich;
MUSATOV, Aleksandr Konstantinovich; PCHELKIN, Yuriy Mikhaylovich;
CHERNOBROVKIN, Aleksey Petrovich; YUNOSHEV, Viktor Dmitriyevich ;
BARTASH, Ye.T., kand. tekhn.nauk, retsenzent; GALANOVA, M.S., inzh.,
red. izd-va; UVAROVA, A.F., tekhn. red.

[Gas-turbine units for locomotives; design and calculation]Loko-
motivnye gazoturbinnye ustanovki; raschet i proektirovanie. [By]
V.V.Uvarov i dr. Moskva, Mashgiz, 1962. 547 p.   (MIRA 15:9)
        (Gas-turbine locomotives)

UVAROV, V.V., doktor tekhn.nauk,prof.; CHERNOBROVKIN, A.P., dotsent, kand.tekhn.nauk; MAHUSHIN, E.A., inzh.

High-power gas-turbine unit with a high pressure of the actuating fluid. Izv.vys.ucheb.zav.;mashinostr.no.1:130-139 '63.
(MIRA 16:5)

1. Moskovskoye vyssheye tekhnicheskoye uchilishche imeni Baumana.
(Gas turbines)

S/096/63/000/004/003/010
E191/E481

AUTHOR: Uvarov, V.V., Doctor of Technical Sciences, Professor

TITLE: Optimum parameters of coolers for gas turbine plants

PERIODICAL: Teploenergetika, no.4, 1963, 23-27

TEXT: Intermediate air coolers installed between several stages
of compression in gas turbine power plants of large output are
considered.   The study is concerned with finding the minimum total
cooling surface when the total cooling water throughput, the total
gas pressure loss and the design of the cooling surfaces are given.
The cooling surfaces chosen are described in the book "Compact
Heat Exchangers" by Keys and London (1955) and were used in a plant
built by the KhTGZ.   Two variants of distributing the water flow
among the several intercoolers are considered: in one all inter-
coolers are in parallel and in the other groups of series-connected
intercoolers are in parallel.   The total intercooler surface in
the purely parallel scheme can be expressed as a function of two
groups of independent variables, namely the rates of flow of water
through each intercooler and the gas (air) velocity through each
intercooler.   With n intercoolers, the total number of
independent variables is $2(n - 1)$ owing to the further conditions

Card 1/2

S/096/63/000/004/003/010
E191/E481

Optimum parameters ...

expressing the known total flow of water and the known flow of air.
Taking the derivatives of the expression for the total intercooler
surface with respect to each independent variable and equating
them to zero, $2(n - 1)$ equations with the same number of variables
are obtained.   In fact, only two derivatives with respect to rates
of water flow and air velocity have to be formed.   The remaining
unknowns are derived from the equations so obtained.   These values
enter into the equation for computing the minimum surface.
The somewhat modified analysis to cover the parallel-series scheme
of intercooler water flow is also given.   There are 4 figures.

ASSOCIATION: Moskovskoye vyssheye tekhnicheskoye uchilishche
             (Moscow Technical High School)

Card 2/2

L 12457-65   EWT(d)/EPA/EWT(m)/EPF(c)/EWP(f)/T-2   Paa-4/Pr-4   SCD(a)/ASD(p)-3/
AFTC(a)/AFETR/AEDC(b)/AFTC(p)/RAEM(1)   WE
ACCESSION NR: AP4048517   S/0147/64/000/004/0121/0125

AUTHOR: Uvarov, V. V.

TITLE: Experimental study of the configuration of a spray flame β
formed by atomization of fuel in a high-temperature airstream .

SOURCE: IVUZ. Aviatsionnaya tekhnika, no. 4, 1964, 121-125

TOPIC TAGS: flame, combustion, heterogenous combustion, fuel
atomization, spray flame, air breathing engine

ABSTRACT: A theoretical and experimental study was made of the spray
flame formed by cocurrent or countercurrent injection of T-1 jet fuel
through a swirl atomizer into airstreams at 873 or 1173K. Injection
pressure in the nozzle (diameter, 2.5×10^{-3} m) was varied in the range
from 4×10^5 to 36×10^5 n/m² (gage). The heated air stream passed
through a converging duct into a constant-cross-section duct equipped
with three flow-rectifying grids and with temperature and pressure
gages. The airstream was then passed through a coverging section
to the fuel-injection nozzle. The stagnation temperature and static
pressure of the airstream were measured, and the flame boundaries

Card 1/2

L 12457-65

ACCESSION NR: AP4048517

were photographed. The limiting diameter of the spray flame, calcu-
lated as a function of injection pressure by a formula previously
derived by S. M. Ilyashenko, was found to be in good agreement with
the experimental values. It is concluded that the formula can be
used for high-temperature and high-velocity airstreams with counter-
current fuel injection, provided the shape coefficient of the droplet
is taken to be 9, rather than 18 as proposed by Ilyashenko. Orig.
art. has: 2 figures and 1 formula.

ASSOCIATION: none

SUBMITTED: 30Apr64   ENCL: 00   SUB CODE: PP

NO REF SOV: 001   OTHER: 001   ATD PRESS: 3125

Card 2/2

L 63450-65   EWT(m)/EWP(b)/T/EWA(d)/EWP(t)/EWP(w)   JD

ACCESSION NR: AP5020645

`E 31-7/65/000 003/0127/0130`
`629.194.34:536.46`

AUTHOR: Uvarov, V. V.

TITLE: Determination of the combustion chamber length required for complete combustion with allowance for friction

SOURCE: IVUZ. Aviatsionnaya tekhnika, no. 3, 1965, 127-130

TOPIC TAGS: combustion chamber, ramjet engine, air breathing engine, friction combustion

ABSTRACT: Methods of calculating the length of a combustion chamber previously developed by Talantov and Il'yashenko did not allow for friction. In this article, a method of calculating the heat release, flow velocity, and temperature as a function of chamber length with allowance for friction is presented. It was shown that for chambers having a relative length of $l/d > 3$, where l is the length and d the chamber diameter, the heat release, flow velocity, and temperature values calculated without the effect of friction are higher than the actual values. Orig. art. has: 9 formulas and 2 figures. [PV]

Card 1/2

L 63450-65
ACCESSION NR: AP5020645

ASSOCIATION: none

SUBMITTED: 27Jan65

NO REF SOV: 001

SUB CODE: HRFT

ATP PRESS 4067

Card 2/2

L 24684-66

ACC NR: AP6015525

SOURCE CODE: UR/0096/65/000/005/0007/0016

AUTHOR: Uvarov, V. V. (Doctor of technical sciences: Professor); Beknev, V. S. (Candidate of technical sciences); Mikhal'tsev, V. Ye. (Candidate of technical sciences); Chernobrovkin, A. P. (Candidate of technical sciences); Lapin, Yu. D. (Engineer); Cherepnin, L. S. (Engineer)

ORG: MVTU im. Bauman

TITLE: High-efficiency 200 megawatt gas-turbine installation

SOURCE: Teploenergetika, no. 5, 1965, 7-16

TOPIC TAGS: gas turbine, electric power plant

ABSTRACT: The advantages of building a high pressure non-regenerative 200 megawatt gas-turbine installation with an approximate weight factor of 3.5 kg/kw are described. This factor is 2.5 times smaller than in steam gas installations and seven times smaller than in steam power installations. Calculations indicate that a gas-turbine installation requires about 50% lower capital investment as compared to a steam power installation, lowers the volume and cost of the main structure three times and the cost per kilowatt-hour not less than 15%. The possibility of building powerful gas- turbine installations with gas temperature of 750-800°C is indicated. Adoption of still higher temperature up to 1200°C, will increase the efficiency to 53-55% and double the power. Orig. art. has: 10 figures and 5 tables. [JPRS]

SUB CODE: 10 / SUBM DATE: none / ORIG REF: 006 / OTH REF: 001

UDC: 621.438.001.5

Card 1/1

L 04399-67   EWT(d)/EWT(m)/EWP(f)/T   WW/JW/WE

SOURCE CODE: UR/0145/66/000/006/0086/0090

ACC NR: AP6027628

AUTHOR: Uvarov, V. V. (Candidate of technical sciences; Docent)

ORG: none

TITLE: Some features of the working processes of a supersonic ramjet engine combustion chamber

SOURCE: IVUZ. Mashinostroyeniye, no. 6, 1966, 86-90

TOPIC TAGS: supersonic combustion ramjet, friction, mathematic model, enthalpy

ABSTRACT: A study has been made of a method of calculating the minimum length of a supersonic combustor with allowance for friction. At high Mach numbers, the air inducted into ramjet engines reaches very high temperatures, e.g., 1370° K at M = 5 and an altitude of 10 km, and this results in flame-holder burnout. Since it is not presently feasible to cool flame-holders, high-Mach-number ramjet engines must be designed without flame-holders, and, therefore, because the combustor length must be increased, friction becomes an important factor in design calculations.

UDC: 621.45:621.43.056

Card 1/5

L 04399-67

ACC NR: AP6027628

The method presented, which takes friction into consideration, was developed on the basis of the following model (see Fig. 1).   A gas
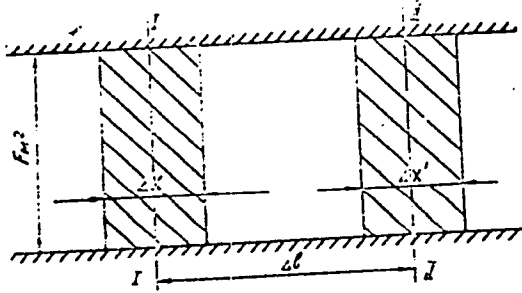

Fig. 1. Combustion model of a gas element

element moves from position I to position II in time Δz sec; its velocities at these positions are w and $w + \Delta w$, respectively; and B_0 kg fuel are present in the element at the initial moment.   The entire fuel burns in z_0 sec.   The fuel combustion is thus expressed by the function $B/B_0 = f(z)$.

Card 2/5

L 04399-67

ACC NR: AP6027628

By simple analysis based on this model, the following two equations were obtained:

$$\frac{H_u}{1 + \alpha L_0} \cdot \frac{dz}{z_0} = \left(c_p + \frac{b^2 T}{p^2}\right) dT - \frac{b^2 T^2}{p^3} dp,$$

$$-\frac{b^2 T}{p^2} dT + \left(\frac{b^2 T^2}{p^3} - \frac{RT}{p}\right) dp = \lambda \frac{w^2}{4r} dl.$$

where Hu is the enthalpy; z the time; b = GR/F (G = wFp/RT; G = flow rate) w, velocity; Lo, combustor length; T, temperature; p, pressure; g, gravitational constant; λ, coefficient of friction; R, gas constant; and α is a constant. The equations are solved by the method of finite differences. In a combustor section Δl, the increase in temperature ΔT is calculated together with the completeness of combustion, expressed as $\frac{\Delta z}{z_0} \Sigma \frac{\Delta z}{z_0}$.

By determining the value of

$$\frac{H_u}{1 + \alpha L_0} \times \frac{dz}{z_0},$$

Card 3/5

L 04399-67

ACC NR: AP6027628

the combustion curve along the chamber can be constructed.

Data calculated for the combustor outlet were in good agreement with experimental data obtained by the author. To complete the calculations, it is necessary to know the gas parameters at the inlet, the composition of the combustible mixture, and the static pressures in the investigated sections. When the combustion products contain solid particles, measurement of the stagnation pressures at the chamber outlet is impossible because the measuring tube clogs. In this case, the presented calculation method is the only way to evaluate the operation of the combustor. In two-phase flow when such highly reactive fuels as boron-hydride, beryllium, lithium, or mixtures of these with hydrocarbons are used, the friction coefficient is larger than in a single phase flow, and, therefore, allowance for friction becomes particularly important.

Figure 2 shows the heat release, velocity, and temperature of the

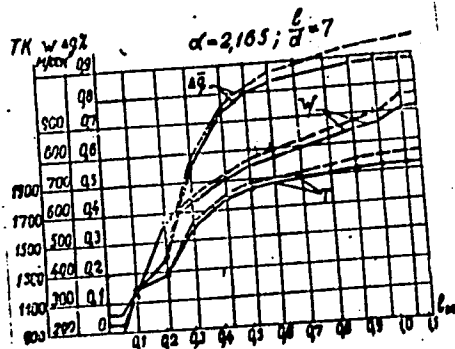Card 4/5

L 04399-67
ACC NR: AP6027628

Fig. 2. Dependence of the heat release, velocity, and temperature of a gas flow on the length of a combustor

T - Temperature; w - velocity; q - heat release; l/d - ratio of chamber length to chamber diameter; a - constant; dotted lines - without allowance for friction: solid lines - with allowance for friction.

flow as a function of axial position in the chamber. Figure 2 shows that when friction is not taken into account, the heat release at the combustor outlet is 7% higher and the velocity and temperature about 3% higher than with allowance for friction. This paper was presented by Docent V. M. Polyayev, Candidate of Technical Sciences, UDN on 10 February 1965. Orig. art. has: 2 figures, 9 formulas and 1 table. [FSB: v. 2, no. 9].

SUB CODE: 21, 20, 12 / SUBM DATE: 10Feb65 / ORIG REF: 002

Card 5/5   vmb

LYUBSKIY, A.S.; UVAROV, V.V.

Use of intubation anesthesia in emergency surgical operations.
Nauch. trudy Chetv. Mosk. gor. klin. bol'. no.1:219-226 '61.
(MIRA 16:2)

1. Iz kliniki obshchey khirurgii lechebnogo fakul'teta 2-go
Moskovskogo gosudarstvennogo meditsinskogo instituta imeni
N.I. Pirogova (zav. kafedroy - prof. V.A. Ivanov) na base Moskov-
skoy gorodskoy klinicheskoy bol'nitsy No.4 (glavnyy vrach G.F.
Papko).
(OPERATIONS, SURGICAL)   (INTRATRACHEAL ANESTHESIA)

LYUBSKIY, A.S.; UVAROV, V.V.

Use of intubation anesthesia in emergency surgical interventions.
Khirurgiia 37 no.4:62-65 '61.   (MIRA 14:4)

1. Iz kliniki obshchey khirurgii (zav. - prof. V.A. Ivanov)
lechebnogo fakul'teta II Moskovskogo gosudarstvennogo medi-
tsinskogo instituta imeni N.I. Pirogova na baze 4-y Gorodskoy
klinicheskoy bol'nitsy (glavnyy vrach G.F. Papko).
                (INTRATRACHEAL ANESTHESIA)

KESHISHEVA, A. A.; LYUBSKIY, A. S.; UVAROV, V. V.

Intravital coronarography. Eksper. khir. no.3:25-30 '62.
(MIRA 15:7)

1. Iz torakal'nogo khirurgicheskogo otdeleniya (zav. - doktor
meditsinskikh nauk A. A. Keshisheva) TSentral'noy klinicheskoy
bol'nitsy (glavnyy vrach A. I. Khrimlyan) 4-go Glavnogo upravleniya
(nach. - prof. A. M. Markov, glavnyy khirurg - deystvitel'nyy
chlen AMN SSSR prof. B. V. Petrovskiy) Ministerstva zdravookhra-
neniya SSSR.

(CORONARY VESSELS--RADIOGRAPHY)   (ANGIOGRAPHY)

L 5192-66   EWP(e)/EWT(m)/EFF(c)/EWP(i)/T/EWP(t)/EWP(o)/EWA(h)   JD/WW/DJ/WB

ACC NR: AP5024999   SOURCE CODE: UR/0286/65/000/016/0062/0062

AUTHORS: Uvarov, V. Ya.; Glebov, Yu. P.; Zhuravlev, F. V.; Yermanok, M. Z.;
Rubin, Yu. L.; Zakharov, M. F.; Kochnova, G. P.; Sukhanova, M. P.

ORG: none

TITLE: Lubricant for heat treatment of metals. Class 23, No. 173869 /announced
by the Organization of Mosgorsovnarkhoz (Organizatsiya mosgorsovnarkhoza)_/

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 62

TOPIC TAGS: lubricant, metal heat treatment, mineral oil

ABSTRACT: This Author Certificate presents a mineral oil and graphite lubricant
for heat treatment of metals. To prevent metals from sticking to the instrument,
talcum and red lead are added to the lubricant. The talcum constitutes 10% by
weight of the additive, and the red lead constitutes 8-25% by weight.

SUB CODE: FP/   SUBM DATE: 06Jul64

Card 1/1   UDC: 665.5

S/078/60/005/009/020/040/XX
B121/B208

AUTHORS: Kolesov, V. P., Skuratov, S. M., Uvarov, V. Ya.

TITLE: Determination of specific heat of aqueous hydrofluoric acid
              solutions

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 5, no. 9, 1960, 1934-1937

TEXT: The determination of the specific heat of aqueous solutions of hydro-
fluoric acid described in publications gives inexact values. The authors
therefore devised a calorimeter by which an exact measurement of the
specific heat of aqueous hydrofluoric acid solutions is possible even in
the range of low concentrations. Temperature was measured on a platinum
resistance thermometer. The voltage at the ends of the thermometer was
determined on a KJI-48 (KL-48) potentiometer using an M-25/3 (M-25/3) mirror
galvanometer with a sensitivity of $0.3 \cdot 10^{-6}$ v/mm·m as the balancing
apparatus. This sensitivity of the galvanometer permitted the measurement
of temperature changes of $0.0003^{\circ}C$. The hydrofluoric acid solutions were
obtained by dilution of 45% hydrofluoric acid which was free from SiF_6^{2-},
SO_4^{2-}, and Pb^{2+}. Their concentrations were determined by titration

Card 1/8

S/078/60/005/003/020/040/XX
B121/B208

Determination of specific heat ...

with NaOH in platinum vessels. The values obtained for the specific heat
of aqueous hydrofluoric acid solutions of different concentrations are sum-
marized in the Tables 1 and 2. It may be seen from these tables that the
specific heat of hydrofluoric acid solutions is considerably lower at 20°C
than at 25°C. The values obtained at 20°C are lower by nearly 0.1% than
the values obtained by Roth and Becker (Ref. 4: W. A. Roth, F. Becker.
Landolt-Börnstein Phys. Chem. Tabellen, 5 Ed., Erg. 2, p. 2, 1188 (1931))
and by 0.3% than those obtained by Thorwaldson and Bailay (Ref. 6: T.
Thorwaldson, E. C. Bailay, Canad. J. Research, 24B, 51 (1946)). The
values of the apparent specific heat F_s of aqueous hydrofluoric acid solu-
tions are much higher than the corresponding values of the other hydrogen
halides. This is explained by the partial depolymerization of hydrofluoric
acid molecules by heating during the experiment. The dependence of the
apparent specific heat F_s on the molality Ml of hydrofluoric acid is ex-
pressed by the formula: $F_s = 1.5 + 2.80 \, Ml^{1/2}$. By means of this formula,
the specific heats of HF solutions at 25°C were calculated for N = 20 to
N = 100, and summarized in Table 3 (N = number of H_2O moles per mole HF).

Card 2/3

Determination of specific heat ...

S/078/60/005/009/020/040/XX
B121/B208

There are 2 figures, 3 tables, and 9 references: 1 Soviet-bloc and 8 non-Soviet-bloc. The two references to English-language publications read as follows: R. S. Ray. Proc. Roy. Soc. (London) A 101, 509 (1922); T. Thorwaldson, E. C., Bailay. Canad. J. Research, 24B, 51 (1946).

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov). Termokhimicheskaya laboratoriya im. V. F. Luginina (Thermochemical Laboratory imeni V. F. Luginin)

SUBMITTED: June 9, 1959

Legend to Table 1:   Measurement results of the specific heat of aqueous HF solutions at 25°C.   1) Molality (Ml); 2) $\sqrt{Ml}$; 3) specific heat c_p, cal/g, degree; 4) apparent specific heat (F_s) cal/mole·degree; a) experiment; b) calculated from the formula $F_s = 1.5 + 2.80\ Ml^{1/2}$.

Card 3/3

YELISEYEV, B.L.; UVAROV, Ye.I.

Table clock with power supply from a light source. Priborostroenie
no.5:13-14 My '61.   (MIRA 14:5)
                    (Clocks and watches)
                    (Solar batteries)

GERSHTEYN, I.N., inzh.; UVAROV, Ye.P.

Glass-reinforced plastic is an efficient polymer material
for concrete framework. Prom. stroi. 41 no.4:34-35 Ap '64.
(MIRA 17:9)

NIKITOVSKII, V. ... [illegible text]

Mastering the operation of highly-efficient tubular ... in the
[illegible] Central Ore Dressing Plant. ... 39 ... 1958)

UVAROV, Yu.P.; L'YANOVA, Kh.L.

Characteristics of the photosynthesis of two standard varieties of apple growing in the mountain and piedmont fruit zones of Alma-Ata Province. Trudy Inst.bot.AN Kazakh.SSR 20:103-111 '64.

(MIRA 18:3)

LEVI, L.I., doktor tekhn. nauk; KUNIN, L.L., kand. khim. nauk,
     retsenzent; CHERNYAK, O.V., inzh., red.; UVAROVA, A.F.,
     tekhn. red.; DEMKINA, N.F., tekhn. red.

[Nitrogen in cast iron for castings] Azot v chugune dlia
otlivok. Moskva, Izd-vo "Mashinostroenie," 1964. 229 p.
                                        (MIRA 17:4)

UVAROVA, A.I.

Role of flies in seasonal dysentery. Zhur. mikrobiol.epid. i immun.
29 no.3:124 Mr '59.   (MIRA 11:4)

1. Iz TSentral'nogo instituta usovershenstvovaniya vrachey.
      (DYSENTERY) (FLIES AS CARRIERS OF DISEASE)

UVAROVA, A. I.

Role of vegetables, fruit and berries in the seasonal increase in dysentery. Zhur.mikrobiol.epid. i immun. 29 no.3:124-125 Mr '58.

(MIRA 11:4)

1. Iz TSentral'nogo instituta usovershenstvovaniya vrachey.

(DYSENTERY) (FOOD--BACTERIOLOGY)

UVAROVA, A.I.

Use of fluorescence analysis for the detection of dysentery bacilli in food products; authors abstract. Zhur.mikrobiol. pid.i immun. 30 no.8:114 Ag '59.   (MIRA 12:11)

1. Iz TSentral'nogo instituta usovershenstvovaniya vrachey.
        (SHIGELLA)
        (FOOD microbiology)

STOLBOVA, A.; UMAROVA, M.U.; UVAROVA, A.I.; VISHNEVETSKAYA, Ye.A.
    TETENKO, N.I., meditsinskaya sestra.

Nurses' councils. Med. sestra 22 no.6:42-45 Je'63.(MIRA 16:9)

1. Predsedatel' Soveta meditsinskikh sester Vladimirskoy ob-
lastnoy bol'nitsy. Detskaya bol'nitsa No.3 Tashkentskoy zhe-
leznoy dorogi (for Umarova). 2. Glavnyy vrach Detskogo kostno-
tuberkuleznogo sanatoriya No.2, Dnepropetrovsk (for Uvarova).
3. Detskoye otdeleniye Krasnodarskoy krayevoy klinicheskoy
bol'nitsy imeni prof. S.V.Ochapovskogo (for Tetenko).
                (NURSES AND NURSING)

UVAROVA, A. O. (Moskwa)

Experimental studies on the effect of corticosteroid hormones on tuber-
culosis. Gruzlica 29 no.1:79-81 Ja '61.

(TUBERCULOSIS exper)
(ADRENAL CORTEX HORMONES pharmacol)

USYUKIN, I.P., prof., doktor tekhn.nauk; PETERSBURGSKIY, A.V., prof.,
    doktor sel'skokhozyaystvennykh nauk; UVAROVA, A.F.

    Ammonium bicarbonate, an effective nitrogen fertilizer.
    Zemledelie 23 no. 2:74-81 F '61.   (MIRA 14:2)
                          (Ammonium carbonate)

USYUKIN, I.P.; AVER'YANOV, I.G.; UVAROVA, A.P.; Prinimali uchastiye:
     DOLGOV, A.A.; CHEREPKOVA, A.A.

Continuous method of the production of ammonium bicarbonate.
Khim.prom. no.10:723-728 0 '62.   (MIRA 15:12)
                         (Ammoniumcarbonate)

28

Anticorrosion properties of edible molasses. A. P.
Uvarova. Sakharnaya Prom. 19, No. 9, 21-3(1946).
Expts. were carried out on the corrosive action of varying-
density molasses, sugar solns., and alk. solns. Screens
wetted with molasses (50, 30, and 10° Brix) did not rust
regardless of whether the molasses samples were alk., neu-
tral, or acid. Twelve sugar soln. rusted iron screens.
Thirty sugar solns. also rusted iron screens but much
more slowly.   M. Hosch

METALLURGICAL LITERATURE CLASSIFICATION
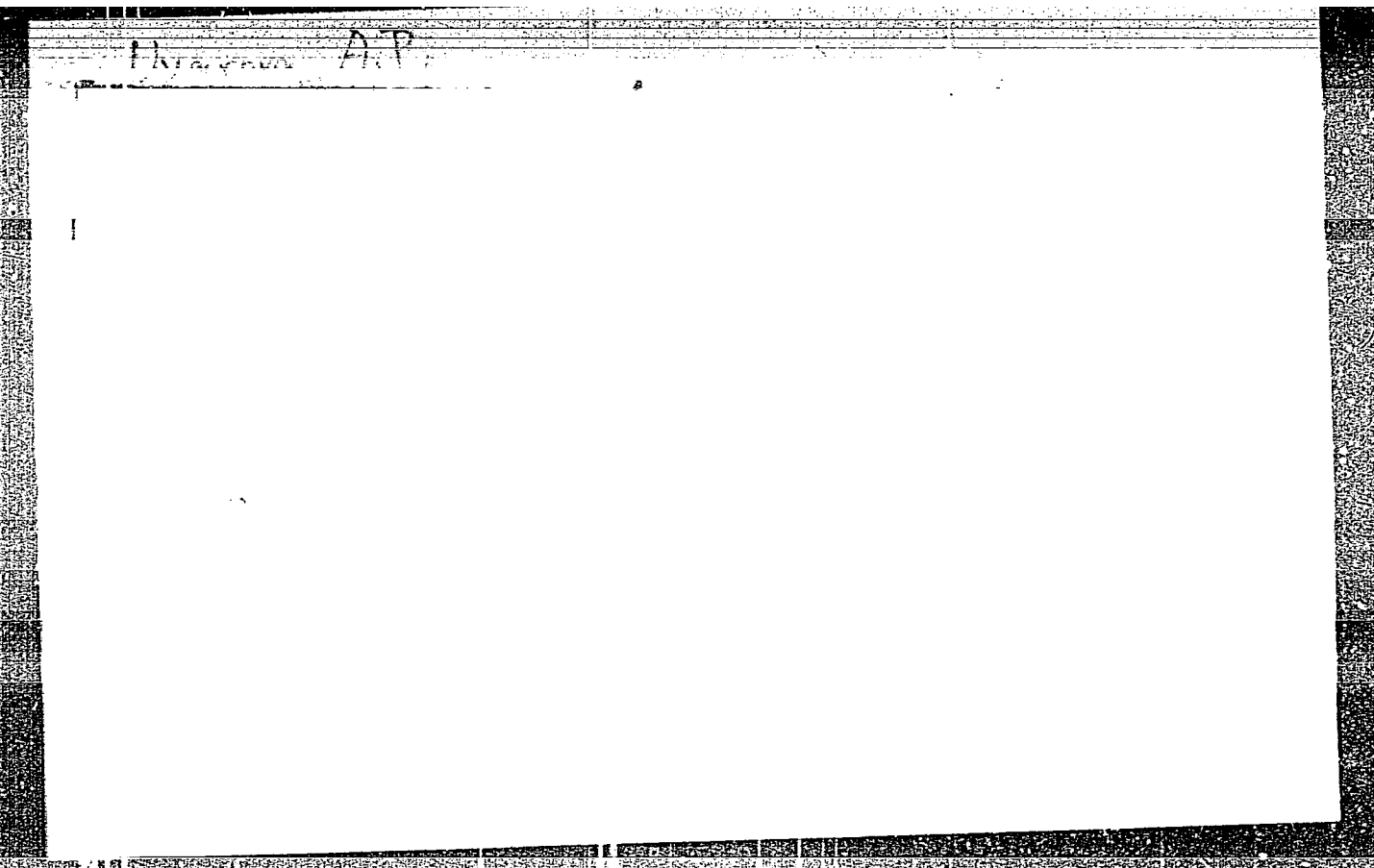
3

BA

665. Method and apparatus for determination of density of refined sugar. V. M. Volochvynskii and A. P. Uvarova (*Sakhar. Prom.*, 1951, No. 8, 14—16: *Sug. Ind. Abstr.*, 1951, 13, 160).—A glass cylinder is placed on a stand on which a plate carrying a needle vertically can be placed with the needle dipping into the vessel, which is filled from a burette with paraffin up to the needle tip, the vol. being noted. A weighed lump of sugar, dipped in paraffin for 3 min., is transferred to the empty vessel which is again filled to the mark. The *d* of the sugar is the wt. divided by the difference between the two vol. The results obtained agree well with those given by more elaborate methods. P. S. ARUP.

UVAROV, A. P.

ZHIDKOV, A.A., kandidat tekhnicheskikh nauk; VOLOKHVYAHSKIY, V.M.,
kandidat 'skhnicheskikh nauk; ZDANOVICH, I.L., nauchnyy sotrudnik;
UVAROVA, A.P., khimik-analitik; PATUSHINSKAYA, A.A., inzhener.

Lowering the losses of sugar in raffinade production. Trudy TSINS
no.4:180-193 '56.   (MLRA 10:5)
                        (Sugar)

UVAROVA, A.V.

BC

B-III -1

Retention of exchangeable magnesium in the physical properties of soils. A. V. UVAROVA and M. I. KAMLOVA (Lenin Abad. Agric. Sci. Proc. Leningrad Lab. Ged. Soi. Inst. Fert., 1934, No. 34, 13—17).—Results of saturating solonets soils with Ca, Mg, and Na indicate that Mg is the exchangeable form does not impart solonets properties to soils.   Ca, Am. (p)

POD"YAPOL'SKAYA, Antonina Andreyevna; UVAROVA, A.V.

[Treatment and prevention of deformations of the spine in children]
Opyt lecheniia i profilaktiki deformatsii pozvonochnika u detei.
Moskva, Medgiz, 1960.   154 p.
(MIRA 14:7)
(SPINE—ABNORMITIES AND DEFORMITIES)

S/032/60/026/010/003/035
B016/B054

AUTHORS: Uvarova, E. I. and Vanyarkina, N. M.

TITLE: Complexometric Determination of Tetraethyl Lead in
              Ethylated Benzines.

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol. 26, No. 10, pp. 1097-1101

TEXT: The authors studied the possibility of a complexometric determina-
tion of tetraethyl lead in ethylated benzines without previous separation
of the lead halide compound (contrary to recommendations of ГОСТ (GOST)
63-52 and 5337-55, and Refs. 1-4). They destroyed the organic lead com-
pounds dissolved in benzine by means of bromine dissolved in CCl_4. It was
found that - in contrast to inorganic lead compounds - the resulting
slightly soluble lead salts were easily soluble in diisobutylene as well
as in methyl and ethyl alcohol. In the exchange reactions of bromine
with diisobutylene or primary alcohols, hydrogen bromide is formed which
favors the decomposition of the organic lead compound and its passage into
the solution. After short boiling of the resulting solution with alkali,

Card 1/2

Complexometric Determination of Tetraethyl
Lead in Ethylated Benzines

S/032/60/026/010/003/035
B016/B054

the color change of the indicator at the point of equivalence in the
titration of lead with Trilon B (in the presence of eriochrome black T at
pH = 10) is just as distinct as in the titration of aqueous solutions of
inorganic lead compounds (Ref. 4). As filtration and extraction are not
necessary, the entire determination can be made in one flask with minimum
time expenditure (10-15 min) and minimum consumption of reagents. The
method suggested was tested on various specimens of ethylated benzine of
the type A-66 (A-66) (see Table). The standard method (ГOCT 63-52,
GOST 63-52) was used for control. Finally, the authors describe the course
of analysis, and give a formula for calculating the content of tetraethyl
lead in benzine (in g/kg). There are 1 table and 4 references: 2 Soviet
and 2 German.

Card 2/2

UVAROVA, E.I.

The problem of determining mineral salts in petroleum. Khim.
i tekh. topl. i masel. 8 no.3:68-69 Mr '63.
(MIRA 16:4)

(Petroleum—Analysis)   (Salts)

UVAROVA, E.I.

Analytical investigations of tungsten catalysts of hydro-
genation. Khim. i tekh. topl. i masel 8 no.9:39-41 S '63.
(MIRA 16:11)

UVAROVA, E.I.; VANYARKINA, N.M.; KUCHEROVA, N.V.

Causes of the contamination of battery sulfuric acid by nitrogen oxides during its production from hydrogen sulfide. Khim.prom. no. 1:52-54 Ja '64. (MIRA 17:2)

UVAROVA, E.I.; RIK, V.M.

Complexometric method for determining molybdenum in catalysts.
Khim. i tekh. topl. i masel 9 no.5:67-69   5 My'64   (MIRA 17:7)

ACCESSION NR: AP4019809   S/0279/64/000/001/0078/0084

AUTHOR: Kasatkina, N. A. (Moscow); Vigdorovich, V. N. (Moscow); Nikitina, Z. M. (Moscow); Uvarova, E. S. (Moscow); Konstantinova, L. I. (Moscow)

TITLE: Behavior of impurities during the crystallization refining of indium

SOURCE: AN SSSR. Izv. Metallurgiya i gornoye delo, no. 1, 1964, 78-84

TOPIC TAGS: indium, indium refining, crystallization refining, impurity elimina-tion, solid phase soluble impurity, solid phase insoluble impurity, zone refining

ABSTRACT: A systematic study was made of the behavior of impurities and the con-ditions present during their elimination from indium in the process of crystalliza-tion refining from molten material. Indium specimens with a known impurity content (Cd, Sn, Pb, Hg, Fe, Ni, Cu, Ag) were subjected to zone refining in a nitrogen stream on equipment with one or two heating zones. Crystals extracted from the smelt in a vacuum furnace, at a residual pressure on the order of 10^{-3} mm Hg, were 100-115 mm long and had a diameter of about 10 mm. The rate of extraction ranged from 0.3 to 2 mm/min. The evaluation of the experimental results employed the author's theoretical classification of impurities present in indium as either easy or difficult to eliminate. The former include most of the impurities present, are characterized by poor solid-solution solubility in In and have distribution co-
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ACCESSION NR: AP4019809

efficient values substantially below 1.0. That coefficient is defined here as the ratio of the solid phase concentration of an impurity to its concentration in the liquid phase. About 10 impurities have such values near 1.0, exhibit significant solid-solution solubility, and are difficult to eliminate. Cu, Ag, and Ni are easy to extract, Sn, Pb, Cd, and Hg are difficult. Sublimation of Cd and Hg, as well as oxidation of Fe and In, were noted as secondary processes favorable to the elimination of impurities during recrystallization. Preliminary removal of Pb and Sn is required. Orig. art. has: 6 graphs, 1 table.

ASSOCIATION: none

SUBMITTED: 09May62   DATE ACQ: 31Mar64   ENCL: 00

                                     NO REF SOV: 007   OTHER: U08
SUB CODE: ML

Card   2/2

UVAROVA, G., inzh.-ekonomist

Figures of growth. Grazhd.av 17 no.3:3 Mr '60.
(MIRA 13:6)

(Aeronautics, Commercial)

MOSHCHANSKIY, N.A.; UVAROVA, I.B.

Physical and chemical stability of solutions on the base of a furfural
acetone monomer. Plast. massy no.2:37-40 '65.   (MIRA 18:7)

KAMARDINKIN, N.P.; SHUVAYEV, A.S.; PALKIN, V.I.; NEMKOVA, A.S.; TARABAN'KO,
P.I.; KHOLMSKIY, R.V.; GNIPP, L.V.; DOBASHIN, G.S.; FLEROVA, L.I.;
MAKSIMOV, N.M.; RAFTYENKO, I.I.; PAL'MOV, I.I.; UVAROV, I.M.;
DUBROVIN, P.Ye.; LIKHACHEVA, O.A.; UVAROVA, I.I.

Conference of the Teaching Staff and Students of the Moscow
Geological Prospecting Institute. Izv. vys.ucheb.zav.; geol. i
razv. 6 no.12:143-148 D '63.   (MIRA 18:2)

KANARDINKIN, N.P.; SHUVAYEV, A.S.; PALKIN, V.I.; NENKOVA, A.S.; TARABAN'KO, P.I.; KHOLNSKIY, R.V.; CHIPP, L.V.; DOBASHIN, G.S.; FLEROVA, L.I.; MAKSIMOV, N.M.; RAFIYENKO, I.I.; PAL'MOV, I.I.; UVAROV, I.M.; DUBROVIN, P.Ye.; LIKHACHEVA, O.A.; UVAROVA, I.I.

Conference of the Teaching Staff and Students of the Moscow Geological Prospecting Institute. Izv. vys. ucheb. zav.; geol. i razv. 6 no.12:143-148 D '63   (MIRA 18:2)

ROZOV, M.N.; NUDEL'MAN, B.I.; UVAROVA, I.T.

Intensification of the production of clinker in rotary kilns.
TSement 27 no.5:14-15 S-0 '61.   (MIRA 14:12)
                    (Portland cement)

SVATKO, L.G.; UVAROVA, I.V.

Distribution of polysaccharide complexes in human stapes in
health and in otosclerosis. Nauch. trudy Kaz. gos. med. inst.
14:283-284 '64.   (MIRA 18:9)

1. Kafedra otorinolaringologii (zav. - prof. N.N.Lozanov),
kafedra gistologii (zav. - prof. G.I.Zabusov) i TSentral'naya
nauchno-issledovatel'skaya laboratoriya (zav. - kand. biolog.
nauk S.V.Senkevich) Kazanskogo meditsinskogo instituta.

L 2380-66   EWP(e)/EWT(m)/EWP(t)/EWP(z)/EWP(b)   LJP(c)   MJW/JD/JW/JG
ACCESSION NR: AP5022541   EWP(k)   UR/0226/65/000/009/0019/0022

AUTHOR: Panichkina, V.V.; Uvarova, I.V.

TITLE: Determination of the specific surface of finely dispersed nickel and tung-
sten powders

SOURCE: Poroshkovaya metallurgiya, no. 9, 1965, 19-22.

TOPIC TAGS: powder metallurgy, tungsten, nickel

ABSTRACT: A procedure is developed for determining the specific surface of finely
dispersed brand BA nickel and tungsten powders with respect to adsorption of dyes
from an aqueous solution. Congo red was used as a dye. The results are in good
agreement with other methods of measuring the specific surface. Indirect proof is
given of the existence of a film on brand BA tungsten powder after reduction.
Orig. art. has: 1 table and 2 graphs.

ASSOCIATION: Institut problem materialovedeniya AN UkrSSR (Institute of Problems
in the Science of Materials)

Card 1/2

L 2380-66   EWP(e)/EWT(m)/EWP(t)/EWP(z)/EWP(b)   IJF(c)   RJW/JD/EW/JG
ACCESSION NR: AP5022541   EWP(k)   UR/0226/65/000/009/0019/0022

AUTHOR: Panichkina, V.V.; Uvarova, I.V.

TITLE: Determination of the specific surface of finely dispersed nickel and tungsten powders

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ABSTRACT: A procedure is developed for determining the specific surface of finely dispersed brand BA nickel and tungsten powders with respect to adsorption of dyes from an aqueous solution. Congo red was used as a dye. The results are in good agreement with other methods of measuring the specific surface. Indirect proof is given of the existence of a film on brand BA tungsten powder after reduction. Orig. art. has: 1 table and 2 graphs.

ASSOCIATION: Institut problem materialovedeniya AN UkrSSR (Institute of Problems in the Science of Materials)

Card 1/2

LUK'YANOVA, O.I., IVANOVA, I.Ya.; RUSTHKO, ..., ...

Physicochemical properties of sodium silicate. ...
Dokl. AN SSSR 161 no.6:1385-1387 Ap '65.

1. Moskovskiy gosudarstvennyy universitet.

LIMAR', T.F.; UVAROVA, K.A.; BULACHEVA, A.F.; SGYVUBM, A.S.; BEDNOVA, I.N.;
    MAKOVSKAYA, E.B.; SOLOMEINA, G.I.; DOLMATOV, Yu.D.; BOBYRENKO, Yu.
    Ya.; KOGAN, F.I.; KOVALENKO, P.N.; IVANOVA, Z.I.; FOKIN, A.V.;
    KOMAROV, V.A.; SOROCHKIN, I.N.; LAVYDOVA, S.M.; RAVDEL', A.A.;
    GORELIK, G.N.; DAUKSHAS, V.K. [Dauksas, V.]; PIKUNAYTE, L.A.
    [Pikunaite, L.]; SHARIPOV, A.Kh.; SHABALIN, I.I.; STEPNOVA, G.M.;
    SHMIDT, Ye.V., DUKOV, S.S.; STRUKOV, O.G.

    Scientific research papers of the members of the All-Union
    Mendeleev Chemical Society (brief information).   Zhur. VHKO
    10 no.3:350-360 '65.   (MIRA 18:6)

    1. Donetskiy filial Vsesoyuznogo nauchno-issledovatel'skogo
    instituta khimicheskikh reaktivov i osobo chistykh khimicheskikh
    veshchestv (for Limar', Uravova, Bulacheva). 2. Ural'skiy nauchno-
    issledovatel'skiy khimicheskiy institut (for Shubin, Bednova,
    Makovskaya, Solomeina). 3. Chelyabinskiy filial Gosudarstvennogo
    nauchno-issledovatel'skogo i proyektnogo instituta mineral'nykh
    pigmentov (Dolmatov, Bobyrenko). 4. Rostovskiy-na-Donu univer-
    sitet (for Kogan, Kovalenko, Ivanova). 5. Leningradskiy tekhnolo-
    gicheskiy institut imeni Lensoveta i Institut mineral'nykh
    pigmentov (for Ravdel', Gorelik). 6. Vil'nyusskiy gosudarstvennyy
    universitet imeni Kapsukasa (for Daukshas, Pikunayte). Nauchno-
    issledovatel'skiy institut neftekhimicheskikh proizvodstv (for
    Sharipov, Shabalin). 8. Tomskiy politekhnicheskiy institut
    imeni Kirova (for Stepnova, Shmidt).

L 16649-65   EWT(m)/EPF(n)-2/EWP(t)/EWP(b)   Pu-4   IJP(c)   JD/JG

AUTHORS: Uvarova, K. A.; Sikora, K. P.

TITLE: Analysis of lead niobate and its solid solutions with barium niobate

SOURCE: Zavodskaya laboratoriya, v. 30, no. 12, 1964, 1443-1444

TOPIC TAGS: spectrophotometry, titrimetry, niobate/ SF 4 spectrophotometer

ABSTRACT: The authors propose a new method of analyzing lead niobate and lead-barium niobate. The Nb is determined by the peroxide method by means of a calibration curve and the use of an SF-4 spectrophotometer. Pb and Ba are determined by dissolving material in ammonium sulfate and H_2SO_4. Tartaric acid is added and enough water to clarify. The precipitate is filtered, washed in ammonium sulfate and in water, then dissolved in Trilon B and KOH and heated. After complete solution of the sulfates, methyl thymol carbamate is added and then neutralized with acetic acid till the color becomes yellow. Ammonium sulfate is added with a buffer solution, and this is titrated with cobalt nitrate till the color changes from yellow to blue. After filtering, the precipitate is washed with ammonium sulfate and then placed with the filter in a beaker and dissolved in Trilon B and KOH, with warming. The solution is then cooled, buffered, and titrated with $MgSO_4$ till the

Card   1/2

L 16681-65
ACCESSION NR: AP4045630

atoms, grain boundaries, etc., the slip bands often consisted of thin doubled (parallel to each other and closely located) slip lines. A local transverse slip was caused by the passage of dislocations to another slip plane, and adaptation bands were formed by the activation of supplementary slip planes. Cracking in a fine-grained alloy was caused by the stress concentration at the dislocations accumulated near obstacles. In a coarse-grained alloy, cracking resulted from the formation of kinks caused by the dislocations pinning in the slip plane, or from the absence of other readily available slip planes. The experimental results indicate that the dislocation mechanism assumed by J. Hoss and C. Barret in the compression of zinc single crystals is the most probable mechanism of kink formation in hexagonal metals. Orig. art. has: 2 figures.

ASSOCIATION: Institut metallurgii im. A. A. Baykova (Institute of Metallurgy)

SUBMITTED: 25Apr64   ENCL: 00   SUB CODE: MM

NO REF SOV: 001   OTHER: 004

Card 2/2

USATENKO, Yu.I.; UVAROVA, K.A.

Amperometric titration with a solution of sodium piperidinedithiocar-
bamate. Zav.lab 26 no.10:1098-1101 '60.   (MIRA 13:10)

1. Dnepropetrovskiy khimiko-tekhnologicheskiy institut im. F.E.
Dzherzhinskogo.
                    (Carbamic acid)   (Metals—Analysis)

USATENKO, Yu. I.; UVAROVA, K. A.

Using dithiocarbamates in amperometric analysis and investi-
gating their analytical properties. Ukr. khim. zhur. 28 no.3:
383-388 '62.   (MIRA 15:10)

1. Dnepropetrovskiy khimiko-tekhnologicheskiy institut im. F. E.
Dzerzhinskogo.

    (Conductometric analysis)   (Carbamic acid)

USATENKO, Yu.I.; UVAROVA, K.A.

Use of bismuth as an amperometric indicator in the titration
of palladium with sodium hexamethylenedithiocarbamate. Ukr.
khim. zhur. 29 no.2:193-197 '63.   (MIRA 16:6)

1. Dnepropetrovskiy khimiko-tekhnologicheskiy institut.
                (Palladium—Analysis)
                (Conductometric analysis)
                (Bismuth)

UVAROVA, K.A.; SIKORA, K.P.

Analysis of lead niobate and its solid solutions with barium niobate.
Zav.lab. 30 no.12:1443-1444 '64.   (MIRA 18:1)

1. Donetskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta
khimicheskikh reaktivov i osobo chistykh khimicheskikh veshchestv.

L 52073-65   EWT(m)/EPF(n)-2/EEC-4/EWP(t.)/EWP(b)   Pu-4   IJP(c)   JD/WW/JG

ACCESSION NR: AP5014096   UR/0363/65/001/004/0591/0596

AUTHOR: Limar', T. F.; Andreyeva, V. I.; Uvarova, K. A.

TITLE: On the synthesis of PbZrO$_3$

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 4, 1965,
591-596

TOPIC TAGS: thermal decomposition, chemical reaction, lead zirconate, zirconium
compound

ABSTRACT: The article is the first of a series devoted to the study of coprecipi-
tation by ammonia of compounds of lead and zirconium, lead and titanium, lead and
tin, and their more complex mixtures, and to the study of the conditions of
thermal decomposition of coprecipitated compounds for preparation of PbZrO$_3$, PbTiO$_3$,
PbSnO$_3$, and their solid solutions. In this first paper, physicochemical methods of
analysis (determination of color, weight, and apparent volume of the precipitates)
were used to examine the ... ... NH$_4$OH – H$_2$O – Pb(NO$_3$)$_2$ ...
– NH$_4$OH – H$_2$O, and PbCl$_2$ ... ... systems. It was found that the in-
teraction of zirconyl chloride solutions with ammonia results in the formation of

Card 1/2