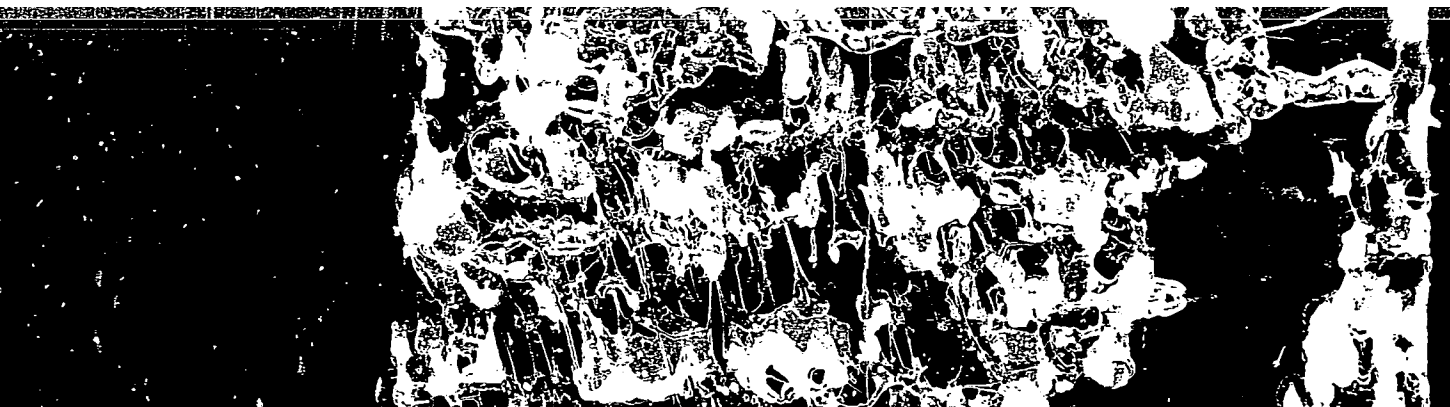


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#

333

MAKSIMOVA, A.A., dotsent

Lepromin test in the pathology of leprosy. Vest. ven. i derm.  
no.3:31-35 My-Je '54. (MLRA 7:8)

1. Iz kafedry koshnykh bolezney (sav. prof. N.A.Torsuyev)  
Rostovskogo meditsinskogo instituta Ministerstva zdavoookhraneniya  
RSFSR.  
(LEPROSY,  
\*lepromin test)

LEPROSY

"The Clinic Picture and Progress of Experimental Leprosy in Rats",  
by A.A. Maksimova, Sbornik Nauchnykh Rabot Po Leprologii i Dermatologii  
1956, 7, pp 405-415 (from Meditssinskiy Referativnyy Zhurnal, Section 1,  
No 2, 1957, p 147).

The incubative stage of experimental leprosy in rats depends on both the nature and extent of the infection. Clinical symptoms become evident 5-12 months after the infection. The author describes the progress of experimental leprosy in detail.

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MAKSIMOVA A.A.

EXCERPTA MEDICA Sec 13 Vol 13/2 Dermatology Feb 59

512. THE EFFECTS OF DENERVATION ON THE DEVELOPMENT AND PROGRESS OF LEPROSY IN RATS (Russian text) - Maksimova A.A.  
Rostov/Don - SBORN. NAUCH. RAB. PO LEPROL. I DERM. (Rostov-na-Donu) 1956. 7 (416-424) illus. 3

Two cm. of femoral nerve and the terminal part of the pudendal nerve of 10 rats were resected. The animals and a group of 10 control rats were infected with leprosy by means of injection of a suspension prepared from lepromatous masses under the skin of the abdomen and into the parenchyma of the testis on the denervated side. Four-five months later 5 rats showed areas of infiltration in the neighbourhood of the infected testicle and two animals developed lepromatous masses of the abdominal wall. At the same time enlargement of lymph glands had become well marked. The strain of the organism was kept for 1.5 years with passages through 7 animals. Marked shortening of the incubation period of leprosy in rats was observed especially in denervated animals. At the same time the clinical picture became more acute and the time of survival was shortened to 5-6 months. The shortening of the incubation period was much less in the control animals and progression of the disease was also slower. Mashkilleison Jr - Moscow (S)

MAK SIMOVA, A.A.

LEPROSY

"The Effect of Superinfection on the Development and Progress of Experimental Leprosy in Rats", by A.A. Maksimova, Sbornik Rabot po Leprologii i Dermatologii, 1956, 7, pp 425-434 (from Meditinskiy Referativnyy Zhurnal, Section 1, No 2, 1957, p 147).

Experiments performed on rats demonstrated that superinfection (2 months after the initial infection) with a suspension from leproma and into the regions of primary infection (subcutaneously in the abdomen and into the parenchyma of the left testicle) resulted in a development of leprosy and in the destruction of the animals in the course of 5 months. Autopsies showed visceral leprosy in all rats. Denerated rats (crosscut of the femoral and spermatic nerves), were destroyed even earlier by superinfection. In all the superinfected animals, osseous changes identical to those in humans suffering from leprosy were observed. In the author's opinion, the development of a serious infection in the superinfected rats depends on profound changes in the specific reactivity and on the affection of the nerve trophicity.

- 39 -

Card 1/1



ABDUSAMETOV, R.Kh. (Semipalatinsk), ANTON'YEV, A.A., kand.med.nauk. (Rostov-na-Donu), BRZHEBSKIY, V.Ch. (Tikhvin, Leningradskaya oblast')  
GRZHEBIN, Z.N., prof. (Cherovitsy), IVAHOV, N.S., prof. (Leningrad)  
KAZAKOV, V.I., dots. (Stavropol' na Kavkaze), SLADKOVICH, S.Ye.  
(Moskva), TORSUYEV, M.A., prof. (Rostov-na-Donu), MAKSIMOVA, A.A.  
dots. (Rostov-na-Donu), FAYN, A.E., kand.med.nauk (Saratov) KRISTIN, L.I.  
prof. (Stanislav), YAKUBSON, A.K., prof. (Novosibirsk), LESNIKOV, Ye.P.,  
assistent (Novosibirsk)

Problems of teaching dermatovenerology in medical institutes. Vest.  
derm. i ven. 32 no.3:60-69 '58 (MIRA 11:7)  
(DERMATOLOGY, educ.  
in Russia (Rus))  
(SYMPHOLOGY, educ.  
in Russia (Rus))

DEVYATOVA, V.A.; DEMENT'YEV, N.F.; YELFIMOV, A.V.; KUPYANSKAYA, A.P.;  
MAKSEKOVA, A.A.; MARGOLIN, L.M.; RUDNEV, G.V.; SIROTOV, K.M.;  
SOLOPOV, A.V.

Conferences, meetings, and seminars. Meteor.i gidrol. no.11:68-  
70 N '62. (MIRA 15:12)  
(Hydrology—Congresses) (Meteorology—Congresses)

МАРШИОВА, А. Д.

26526 Влияние условий воспитания посадочных клубней на их семенные качества.  
Sad i ogorod. 1949, No. 8, c. 77-78

30: ЛЕТОПИСЬ NO. 35, 1949

**MAKSIMOVA, Aleksandra Dmitriyevna**

[Early potatoes] Ranni kartofel'. [Moskva] Moskovskii rabochii,  
1956. 95 p. (MIRA 10:2)  
(Potatoes)

MAKSIMOVA, Aleksandra Dmitriyevna

[Potatoes] Kartoffel'. Moskva, Mosk.rabochii, 1959. 37 p.  
(MIRA 13:10)

(Potatoes)

MAKSIMOVA, A.D., kand. sel'khoz. nauk; KOBRRIN, B., red.; KUZNETSOVA, A.,  
tekhn. red.

[Potatoes; advice, proposals, recommendations, and the  
practices of efficient workers] Kartoffel'; sovety, predlozhenia,  
rekomentatsii, opyt poredovikov. Moskva, Mosk. rabochii, 1963.  
268 p. (MIRA 16:5)

1. Moskovskoye oblastnoye nauchno-tekhnicheskoye obshchestvo  
sel'skogo khozyaystva. (Potatoes)

MAKSIMOVA, A.G.

Petroglyphs in the Tamgaly gorge. Vest. AN Kazakh. SSR 14 no.9:  
108-110 S '58. (MIRA 11:11)  
(Tamgaly region--Petroglyphs)

25657  
S/080/60/033/012/012/024  
D209/D305

1.2400

2208, 2808, 2515

AUTHORS: Anitov, I.S., and Maksimova, A.G.

TITLE: Galvano-diffusion brazing of titanium

PERIODICAL: Zhurnal prikladnoy khimii, v. 33, no. 12, 1960,  
2724 - 2728

TEXT: Titanium is an excellent constructional material for many applications, but its low antifriction properties set it at a disadvantage and the present work was carried out in order to obtain firmly adhering brass layers on the surface of the titanium. Brass plating from cyanide solutions was not successful, so the possibility of using a galvano-diffusion method was investigated. The principle is to deposit a layer of copper of the required thickness on the titanium and then to fire the parts in a medium containing the vapors of volatile compounds of zinc, the copper being saturated with zinc to produce brass. Technically pure titanium mark VT-1, produced in a vacuum arc furnace was used, and the ingots weighing 50 kg were forged into billets from which samples for tes-  
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25657

3/080/60/033/012/012/024  
D209/D305

## Galvano-diffusion brazing ...

ting of dia. 10 mm and length 15 mm were cut. The work consisted of the following basic steps: 1) Preparation of the surface of the titanium to receive the copper plate; 2) Deposition on the titanium firmly adhering layers of copper of thickness up to 1.0 mm; 3) Firing in the vapors of volatile zinc compounds to produce brass. Before etching the samples, they were degreased with lime and washed with water. The best etching solution was found to be concentrated hydrochloric acid at 50°. For galvanic deposition of copper the standard acid electrolyte used was  $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$  — 200-250 g/l,  $\text{H}_2\text{SO}_4$  — 50-75 g/l; temperature 18-20° and current density 1-2 A/dm<sup>2</sup>. To obtain copper coatings of thickness greater than 30-40  $\mu$ , it was necessary to do the work in two stages. First, the etched parts are plated with copper 15-20  $\mu$  thick, are fired in a vacuum ( $10^{-3}$  to  $10^{-4}$  mm Hg) to obtain a good bond with the base metal and are then plated with a second layer of copper to the desired thickness. With regard to diffusion brazing the copper layer was converted into brass by covering the parts with a mixture of zinc dust,

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S/080/60/033/012/012/024  
D209/D305

Galvano-diffusion brazing ...

fire-clay, ferro-silicon and ammonium chloride, the amount of which was calculated from the weight of copper deposited. Quite satisfactory results were obtained by firing at 730-750° for 6 hours, the copper layers 1.0 mm thick being almost completely brazed. The microstructure of the brazed layer (firing conditions 750° for 6 hours) is shown. It is clear that ( $\alpha + \beta$ ) brass is formed with transition layers on the Cu-Ti boundary. Friction testing was carried out on the Amsler machine with a rate of sliding of 0.4 m/sec. and with varying specific loads, from 15 to 100 kg/cm<sup>2</sup> using continuous lubrication. There are 3 figures and 2 references: 1 Soviet-bloc and 1 non-Soviet-bloc. ✓

SUBMITTED: January 7, 1960

Card 3/3

ALTAYEV, Sh.A., kand.tekhn.nauk; POLOZHIY, F.M.; MASTER, A.Z.; ZHISLIN, I.M.;  
SHAPOSHNIKOVA, I.I.; NABOKIN, V.F.; ~~MAKSIMOVA, A.I.~~;  
BOYKO, A.A., red.; LERNER, B.I., red.; MIROSEVICHENKO, V.D.,  
red. izd-va; LOMILINA, L.N., tekhn. red.

[Karaganda soil basin; reference book] Karagandinskii ugol'nyi  
bassein; spravochnik. Pod obshchei red. A.A.Boiko i B.I.  
Lernera. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po gornomu  
delu, 1962. 367 p. (MIRA 15:3)

1. Karagandinskii khimiko-metallurgicheskiy institut Akademii  
nauk Kazakhskoy SSR (for Altayev). 2. Karagandinskii sovnarkhoz  
(for Polozhiy, Master, Zhislin, Shaposhnikova). 3. Kombinat  
Karagandsugol' (for Nabokin). 3. Karagandinskii nauchno-  
issledovatel'skiy ugol'nyy institut (for Maksimova).  
(Karaganda Basin--Coal mines and mining)

GEL'FAND, F.M., kand. tekhn. nauk; MAKSIMOVA, A.I., otv. red.

[Safety and effectiveness of blasting operations in  
category mines] Bezopasnost' i effektivnost' vzryvnykh  
rabot v kategornykh shakhtakh. Moskva, Nedra, 1965.  
148 p. (MIRA 18:8)

MAKSIMOVA, A. K.

Ovchinnikov, A. I. and Maksimova, A. K. - "The physico-chemical processes taking place in the butyrometer in determining the fat content of milk," Trudy Vsesoyuz. nauch.-issled. in-ta moloch. prom-sti. Issue 11, 1949, p. 4-13, - Bibliog: 5 items

SO: U-4034, 2 Oct 53, (Letopis 'Zhurnal 'nykh Statey, No. 10, 1949).

A. K. MAKSIMOVA

"Defining the methods of determining the fat content in milk and dairy products and establishing the value of a unit graduation on the butyrometer scales." Report 3: A. I. Ovchinnikov and A. K. Maksimova. "The determination of the fat content in low-fat milk and buttermilk." Trudy Vsesoyuz. nauch.-issled in-ta moloch. prom-sti, Issue 11, 1949, p. 19-63, - Bibliog: 7 items

SO: U-4034, 20 Oct 53, 'Letopis 'Zhurnal 'nykh Stroy, No. 16, 1949).

MAK SIMOVA AR

✓ Test method for the bacteriological examination of milk  
and milk products: A. K. MakSimova; Fresh Milk  
Technology, Inst. Milk Technol. USSR, No. 18, 70-2,  
Moscow, 1955, No. 452 - Hydrolyzed milk agars  
give higher bacterial counts. B. S. Lavine

MAKSIMOVA, A.; ZELENOV, A.

~~Regulating~~ moisture in processed cheese. Moloch. prom. 18 no.4:  
38 '57. (MIRA 10:4)

1. Alma-Atinskiy zavod plavlenykh syrov.  
(Cheese)



MAKSIMOVA, A.K. starshiy nauchnyy sotrudnik; GRUDZINSKYA, E.Ye., mladshiy  
nauchnyy sotrudnik

Microflora of various kefir fungi and the principles of the  
selection of pure cultures for the kefir leaven. Trudy VNIMI  
[Mol.] no.20:52-8, '59. (MIRA 13:10)  
(Kefir) (Bacteriology--Cultures and culture media)

IRTUGANOVA, M.Kh.; MAKSIMOVA, A.M.

Determining metallic mercury in canned meat. *Vop.pit.* 19 no.4:87  
Jl.-Ag '60. (MIRA 13:11)

1. Iz sanitarno-pishchevoy laboratorii Chitinskoy oblastnoy  
sanitarno-epidemiologicheskoy stantsii.  
(MERCURY-ANALYSIS) (MEAT, CANNED)

KLOCHKOV, V.V., inzh.; MAKSIMOVA, A.M., inzh.

Using suspension methods in assembling reinforced concrete  
span elements of viaducts. Transp.stroi. 10 no.1:14-17  
Ja '60. (MIRA 13:6)

(Viaducts)

FIGULEVSKIY, G.V.; MAKSIMOVA, A.M.

Formation of turpentine. Trudy Bot. inst. Ser. 5 no.66-82 '61.  
(MIRA 14:7)

(Turpentine)

06341  
SOV/141-2-1-13/19

AUTHOR: Maksimova, A.M.  
TITLE: Results of an Investigation of a Modified Reflex Klystron  
PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika, 1959, Vol 2, Nr 1, pp 111 - 124 (USSR)  
ABSTRACT: The structure investigated is that of Figure 1, in which the reflector is in two parts: the first, a cylindrical grid; the second, a cylindrical plane electrode. The assumptions made are: the electrons leave the equi-potential cathode with zero velocity; there are no mutual effects between electrons; the alternating field across the resonator gap  $E_1E_2$  is sinusoidal and confined to the gap; the transit time across the gap is much less than a period of oscillation; the grids  $E_1E_2$  absorb no electrons and the voltage across them is small compared with their direct potential. It is shown that the use of two electrodes to produce a retarding field enables a large number of electron bunches to be focused simultaneously, or nearly so, at the resonator. The mode width (in frequency) is greater than for a comparable single-reflector klystron

06341

SOV/141-2-1-13/19

Results of an Investigation of a Modified Reflex Klystron

but the power output is rather less. Because of the cylindrical shape of the control grids the time of flight of an electron is expressed as the sum of terms like the second expression at the top of p 112. As a result the transit angle of a cylindrical surface of electrons in the outermost retarding space is Eq (1) and in a simple radial klystron is Eq (3). The corresponding focusing conditions are Eqs (2) and (4). Analysis of these expressions shows that when  $\xi$ , the modulation coefficient, is very small, the flight time in the retarding region is independent of the exit phase from the "modulator". Moreover, by altering  $n_1/n_2$ , the ratio of the "retardation

coefficients" of the two retarding zones, bunches of electrons may be focused on the modulator whose exit phases embrace 6-8 degrees. The mode peaks may be found by solving Eqs (5) and (2) simultaneously. Since these are transcendental, the graphical method of Figure 2 is used. When the exit phase  $\phi = \pi$  Eq (5) simplifies to Eq (6) and the expression for  $\xi$  becomes simply Eq (9), where  $L$  is given graphically in Figure 3. The region over which

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SOV141-2-1-13/19

Results of an Investigation of a Modified Reflex Klystron

oscillations are possible is Eq (10), which should be compared with Eq (12) for an ordinary klystron. Experiments have been made at wavelengths of 60 and 89 cm on a klystron with control surfaces at radii of 0.4, 0.55, 1.0 and 1.5 cm. Figures 4 and 5 have axes of first reflector and resonator voltages. Curves are plotted for various second-reflector voltages and constant-resonator-current lines are indicated dotted. The second retardation coefficient is shown in Figures 6 and 7 against exit phase. Table 1 compares theoretical and experimental values of wavelength for the strongest mode. When the first reflector is positive the error does not exceed 1%; when negative not more than 30%. The appendix derives rigorous expressions for: flight time in each zone; current density; transit angle in the conversion zone. There are 7 figures, 1 table and 6 references, 4 of which are Soviet and 2 German.

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06341

Results of an Investigation of a Modified Reflex Klystron  
SOV/141-2-1-13/19

ASSOCIATION: Chelyabinskiy politekhnicheskii institut  
(Chelyabinsk Polytechnical Institute)

SUBMITTED: November 10, 1957

Card 4/4



33228

S/141/61/004/006/015/017

E192/E382

9.4220 (1052, 1331)

AUTHOR: Maksimova, A.M.

TITLE: High-frequency power and electronic efficiency of an oscillator tube with two decelerating electrodes

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika, v. 4, no. 6, 1961, 1121 - 1137

TEXT: The investigation conducted in Ref. 1 (A.M. Maksimova - Izv. vyssh. uch. zav., Radiofizika, 2, 111, 1959) indicates the possibility of increasing the output power and the electron efficiency of reflex klystrons if they are provided with two decelerating electrodes and operate under the conditions of small mode numbers. This possibility is investigated both theoretically and experimentally. It is shown that the power transmitted to the resonator by the electron beam and the electron efficiency of the tube are expressed by:

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S/141/61/004/006/015/017

E192/1382

High-frequency power ....

$$P_e = \frac{i_0 u_m}{2\pi} \xi L = \frac{2i_0 u_m \cos \delta D X_2 J_1(X_2)}{\theta_k} = \frac{2i_0^2 \cos^2 \delta}{U_{3\kappa n}} |J_1(X_2)|^2; \quad (9)$$

$$\eta_e = \frac{1}{2\pi} \xi L = \frac{2 \cos \delta}{\theta_k} D X_2 J_1(X_2) = \frac{2i_0 \cos^2 \delta}{U_{3\kappa n} u_m} |J_1(X_2)|^2. \quad (10)$$



where:

$$L = 2\pi \sin \theta_k J_1(X_1), \quad (3)$$

$$\theta_k = \frac{4\omega}{v_m} \left[ \frac{1}{n_1} + v \bar{x} \left( \frac{1}{n_2} - \frac{r_n}{r_m} \frac{1}{n_1} \right) \right]. \quad (4)$$

The bunching parameter  $X_2$  is determined from:

$$X_2 = \frac{1}{2} \xi \frac{\xi k}{D} \quad (5)$$

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E192/E382

High-frequency power ....

and D is given by:

$$D = \frac{1 + (n_1/n_2 - r_0/r_m) x^{1/2}}{1 + (n_1/n_2 - r_0/r_m) x^{-1/2}} \quad (6)$$

$$= \frac{1 + x^{1/2} [(1-x)(x + |u_a| u_m^{-1})^{-1} d_1 d_2 - 1]}{1 + x^{-1/2} [(1-x)(x + |u_a| u_m^{-1} d_2/d_1 - 1)]} = f\left(x, \frac{|u_a|}{u_m}, \frac{d_2}{d_1}\right) \quad (7)$$

$$d_1 = r_m \ln(r_0/r_m);$$

$$d_2 = r_0 \ln(r_a/r_0) \quad (8)$$

The notation adopted in the above equations is as follows:

$r_0$  is the radius of the first decelerating electrode,

$r_a$  is the radius of the second decelerating electrode,

$r_{g1}$  and  $r_{g2}$  are the radii of the modulator grids,

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S/141/61/004/006/015/017  
E192/E382

High-frequency power ....

- $r_m$  is the mean radius of the modulator,
- $\epsilon$  is the transit angle for an electron in the decelerating space,
- $k$  is the transit angle of a non-perturbed electrode in the decelerating space,
- $\psi$  is the exit phase angle for an electron,
- $u_o$  is the potential of the first decelerating electrode,
- $u_a$  is the potential of the second decelerating electrode,
- $u_m$  is the modulator potential,
- $v_m = \sqrt{2(e/m)u_m}$ ,
- $x = u_o/u_m$ ,
- $n_1 = (1 - x)/r_m \ln(r_o/r_m)$  which is the decelerating coefficient for the gap between the modulator and the first decelerator,



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E192/E382

High-frequency power . . . .

$n_2 = (x + |u_a|/u_m)/r_o \ln(r_a/r_o)$  is the decelerating coefficient for the gap between the first and second decelerating electrodes.

$u_1$  is the alternating voltage amplitude on the grid of the resonator,

$\xi = u_1/u_m,$

$\delta$  is the deviation of the mean transit angle from its value in the centre of the generator zone,

$U_{KB}$  is the equivalent admittance of the resonator,

$i_o$  is the operating current of the tube, and

$\omega$  is the frequency.

On the basis of Eq. (9) it is easy to determine the starting current and the voltage  $u_1$  of the resonator. The electron efficiency of the tube with two decelerating electrodes as a function of  $Q_k$  is evaluated for constant  $u_m, i_o, U_{KB}$

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E192/E382

High-frequency power ....

(Fig.3)

and  $\cos \delta$  for the following values of  $D$ : Curve 1- $D = 0.5$ ; Curve 2- $D = 1$  and Curve 3- $D = 2$ ; Curve 4 is calculated for  $D = 0.5$  for the accelerating potential twice as high as that of the other curves. The problem was investigated experimentally by means of a tube operating at wavelengths of  $\lambda = 60$  cm and  $\lambda = 89$  cm. The tube was excited in the modes having indices  $k = 2$  and  $k = 3$ . Analysis of the experimental results obtained with the tube shows that the maximum high-frequency power is obtained under the condition  $n_1/n_2 > 1$  for all the oscillation zones with indices  $k = 2, 3$ . The highest oscillation amplitudes were observed in the zones with high accelerating potentials ( $4n_1/n_2 > 1$ ). The power integral for the above conditions shows that its maximum value is equal to  $2\pi \times 0.58$ , which coincides with its maximum value for a reflex klystron. Increasing the maximum high-frequency power in the investigated tube with respect to a reflex klystron

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E192/E382

High-frequency power ....

can be explained therefore by an improved bunching of the electrons under the operating conditions  $n_1/n_2 > 1$ . The experimental results are found to be in satisfactory agreement with the theoretical data (obtained for a tube of flat construction).

There are 8 figures, 1 table and 3 Soviet-bloc references.

ASSOCIATION: Chelyabinskiy politekhnicheskiy institut  
(Chelyabinsk Polytechnical Institute)

SUBMITTED: January 2, 1959 (initially)  
May 2, 1961 (after revision)

+

Card 7/87

MAKSIMOVA, A.M.

3L628

S/186/62/004/001/008/008  
E075/E436

21.7200

AUTHORS Shvedov, V.P., Ankudinov, Ye.P., Bunin, B.G.  
Maksimova, A.M., Ivanova, L.M.

TITLE Determination of low levels of radioactive impurities  
in water

PERIODICAL Radiokhimiya v. 4, no. 1, 1962, 110-116

TEXT The authors outlined briefly sampling methods, concentration measurement and investigation of radioactivity of aqueous samples. The samples (1 to 1.5 litres) were taken from different depths or surface of a given water source, the adsorption of the active species on the walls of the sample holder being prevented by the addition of HCl. Subsequently, the radioactive products were concentrated by evaporation, coprecipitation, filtration, electrolysis, ion-exchange, etc. Since in 1960 there was a marked lowering in the specific radioactivity of water from different sources as compared with 1958 and 1959, it was necessary to use a counting device with the background of 0.5 to 1 imp/mic for the measurement and determination of the weak absolute radioactivities. For the identification of isotopes and  
Card 1/3



1

Determination of low levels

S/186/62/004/001/008/008  
E075/E436

determination of their absolute activity, calibration of a  $\gamma$ -spectrometer was carried out using energies of known mono-chromatic  $\gamma$ -radiators and absolute activities measured by a  $^{40}\text{K}$  counter. Investigation of the artificial radioactivity in water proceeded in two directions: a) the total radioactivity was determined for a given water source every three months and b) absolute radioactivity was determined of some of the isotopes derived from fragmentation with special attention being paid to long-lived  $\text{Sr}^{90}$ . To determine fragmentation activity radiochemical, radiometric and  $\gamma$  spectrometric analysis methods were used. For example  $\text{Sr}^{90}$  content was determined by carrying out radiometric analysis of  $\text{Y}^{90}$  with the subsequent measurement of its disintegration with a counter having the minimum background. For other isotopes derived from fragmentation determinations were made of  $\text{Ce}^{144}$  ( $T = 284.5$  days),  $\text{Pr}^{144}$  ( $T = 17.5$  min) and  $\text{Ru}^{106}$  ( $T = 366.6$  days) +  $\text{Rh}^{106}$  ( $T = 30$  sec). Residues after evaporation of the samples were examined using the spectrometer with all the scale of discriminator displacement. Such an examination gave the regions of  $\gamma$  spectrum which revealed the

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Determination of low levels

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E075/E436

presence of the activity. In conclusion, the authors indicated that the possibility of determining the radioactivity of water is dependent on the amount of radioactive materials present in the water source, the nature of isotopes (half-life period, energy of irradiation, disintegration pattern) and sensitivity of the method of irradiation used. X

SUBMITTED: February 8, 1961

Card 3/3

BELYAYEV, L.I.; GEDONOV, L.I.; GRITCHENKO, Z.G.; MAKSIMOVA, A.M.;  
SHVEDOV, V.P.; YAKOVLEVA, G.V.

Radioactive fallout in the Crimea in 1960-1961 Atom. energ. 15  
no.3:264-265 S '63. (MIRA 16:10)

(Crimea—Radioactive fallout)

ZOLOTAREV, V.I.; PEKSHEV, Yu.A.; AVSENEV, Yu.M.; KAPRANOV, I.A.; KISVIANTSEV,  
L.A.; SHVETSOV, N.I.; TELEGIN, Ya.I.; POTAPOV, V.I.; KISVIANTSEV,  
L.A.; ZYKOV, A.A.; NETRUSOV, A.A.; SEMIN, V.P.; MAKSIMOVA, A.P.;  
NIKOLAYENKO, Zh.I.; VOLKOV, N.V.; KALASHNIKOV, A.A.; FLAKSIN, S.V.;  
POPOV, N.N.; KARSHINOV, L.N.; YAKIMOVA, T.A.; BASHKANIKHIN, I.K.;  
KUTKOVICH, A.Ya.; SHALASHOV, V.P.; VORONKOV, F.N.; VEKSHIN, G.K.;  
CHISTYAKOV, M.A.; IVANOV, N.I., red.; SLADKOVSKIY, M.I., red.;  
LEPEIKOVA, Ye., red.; MOSEVINA, R., tekhn.red.

[Economic development of the people's democracies] Razvitie ekonomiki stran narodnoi demokratii; obzor za 1957 g. Pod red. N.I. Ivanova i dr. Moskva, Izd-vo sots.-ekon.lit-ry, 1958. 610 p. (MIRA 12:7)

1. Moscow. Nauchno-issledovatel'skiy kon'yunktorny institut.  
(Economic conditions)

ZOLOTAREV, V.I.; AVSENEV, Yu.M.; KAPRANOV, I.A.; KISVIANTSEV, L.A.; PEKSHEV, Yu.A.; SHVETSOV, M.I.; TELEGIN, Ya.I.; POTAPOV, V.I.; KISVIANTSEV, L.A.; ZYKOV, A.A.; NEFUSOV, A.A.; SENIN, V.P.; MAKSIMOVA, A.P.; NIKOLAYENKO, Zh.I.; VOLKOV, N.V.; KALASHNIKOV, A.A.; FLAKSIN, S.V.; POPOV, N.M.; KARSHINOV, L.M.; YAKIMOVA, T.A.; BASHKANIKHIN, I.K.; KETKOVICH, A.Ya.; SHALASHOV, V.P.; VORONKOV, F.M.; VEKSHIN, G.K.; CHEISTYAKOV, M.A.; IVANOV, N.I., red.; SLADKOVSKIY, M.I., red.; LEPNIKOVA, Ye., red.; MOSKVINA, R., tekhn.red.

[Development of the economy of the people's democracies; a survey for 1957] Razvitiye ekonomiki stran narodnoi demokratii; obzor za 1957 g. Pod red.N.I.Ivanova i dr. Moskva, Izd-vo sotsial'no-ekon. lit-ry, 1958. 610 p. (MIRA 12:2)

1. Moscow. Nauchno-issledovat. kon'yunktorny institut.  
(People's democracies) (Economic conditions)

PEKSHEV, Yu. A.; LENSKIY, B. V.; AVSENOV, Yu. M.; MILONOV, V. S.; KISVIYANTSEV, L. A.; TELEGIN, Ya. I.; POTAPOV, V. I.; NETRUSOV, A. A.; ZYKOV, A. A.; KUDIN, B. M.; MAKSI-MOVA, A. P.; NIKOLAYENKO, Zh. I.; VOLKOV, N. V.; SHVETSOV, N. I.; PLAKSIN, S. V.; POPOV, N. N.; KARSHINOV, L. N.; YAKIMOVA, T. A.; SHALASHOV, V. P.; VISYANIN, Yu. L.; KRASNOV, L. V.; PUSENKOV, N. N.; IVANOV, N. I., red.; ZOLOTAREV, V. I., red.; SLADKOVSKIY, M. I., red.; LEPNIKOVA, Ye., red.; KOROLEVA, A., mladshiy red.; NCGINA, N., tekhn. red.

[Economic development of the people's democracies; survey for 1959]  
Razvitie ekonomiki stran narodnoi demokratii; obzor za 1959 god. Pod red. N. I. Ivanova i dr. Moskva, Izd-vo sotsial'no-ekon. lit-ry, 1960.  
305 p. (MIRA 14:6)

1. Moscow. Nauchno-issledovatel'skiy kon'yuktorny institut.  
(Europe, Eastern--Economic conditions)

BLOSHANSKIY, Yu.M.; MAKSIMOVA, A.P.

Effective therapy of cervical erosion. Sov.med. 17 no.9:36 S '53.  
(MIRA 6:9)

1. Rodil'nyy dom Chelyabinska.

(Uterus--Diseases)

MAKSIMOVA, A. P.

USSR/Zooparasitology - General Problems.

G-1

Abs Jour : Ref Zhur - Biol., No 6, 1958, 24309

Author : Maksimova, A.P.

Inst : -

Title : Ide Parasitofauna from Central Kazakhstan Reservoirs.

Orig Pub : Tr. In-ta zool. AN KazSSR, 1957, 7, 141-150

Abstract : In 215 ides from the basin of the Nury and Sary-Su Rivers and the Irgiz-Turgay basin, 31 species of parasites were noted. The parasitofauna includes parasites specific for ides (*Dactylogyrus tuba* and others) and parasites common to many carp fishes. These parasites pathogenic to ides were noted: *D. tuba*, *D. alatus* forma major: *adolescaria* strigeid-- *Diplostomulum spathaceum*, *D. clavatum*; crustacea-- *Argulus foliaceus*, *Ergasilus sieboldi* and others. A list of ide parasites is furnished by individual reservoirs.

Card 1/1



MAKSIMOVA, A. P.

USSR/Zooparasitology - Parasitic Worms.

G-2

Abstr Jour : Ref Zhur - Biol., No 6, 1958, 24370

Author : Boev, S.N., Lavrov, L.I., Zakhryalov, Ya.N., Maksimova,  
A.P.

Inst : -

Title : Data on Helminthofauna of Wild Ruminant Animals of Western  
Tyan-Shan.

Orig Pub : Tr. In-ta zool. AN KazSSR, 1957, 7, 151-155

Abstract : In wild ruminants of the Aksu-Dzhebaglin game reserve, 28  
species of helminths were found, among them 25 in arkhar  
(3 specimens were dissected), 18 in Siberian ibex (9), 4  
species in roe deer (3). In Siberian ibex, *Marshallagia*  
*mongolica*, *Marchalus raillieti* and *Skrjabinema* were iden-  
tified for the first time; in roe deer-- *N. oiratianus*;  
in arkhar, *N. abnormalis* and *Ostertagia trifurcata*. The  
scarcity of helminthofauna in arkhar and roe deer, the  
low intensity of infection and almost total absence of

Card 1/2

USSR/Zooparasitology - Parasitic Worms.

G-2

Abs Jour : Ref Zhur - Biol., No 6, 1958, 24370

cestodes is related to climatic factors. At present, 32 species of helminths altogether are known in arkhar, 27 in Siberian ibex, and 20 in roe deer. A high degree of infection by skreben is noted in all 3 species of ungulates.

Card 2/2

AGAPOVA, A.I.; MAKSIMOVA, A.P.

Parasites of fishes in waters of southern Kazakhstan. Trudy Inst.  
zool. AN Kazakh. SSR 14:71-87 '60. (MIRA 13:12)  
(Chu Valley--Parasites) (Talas Valley--Parasites)  
(Parasites--Fishes)

MAKSIMOVA, A. P.

Trematodes of wild water birds in the Turgay lakes. Trudy Inst.  
zool. AN Kazakh. SSR 16:125-134 '62. (MIRA 15:10)

(Turgay gates--Trematoda)

(Turgay gates--Parasites--Water birds)

MAKSIMOVA, A. P.

Parasites of fishes in Lake Balkhash. Trudy Inst. zool. AN  
Kazakh. SSR 16:145-156 '62. (MIRA 15:10)

(Balkhash, Lake--Parasites--Fishes)

MAKSI MOVA, A.P.

Cestodes of wild water birds in the Turgay lakes. Trudy Inst. zool.  
AN Kazakh. SSR 19:101-116 '63. (MIRA 16:9)  
(Turgay Tableland--Cestoda)  
(Turgay Tableland--Parasites--Water birds)

MAKSIMOVA, A.P.

New species of cestodes from the swans of Kazakhstan. Trudy Inst.  
zool. AN Kazakh. SSR 19:126-132 '63. (MIRA 16:9)  
(Kazakhstan—Cestoda) (Kazakhstan—Parasites—Swans)

MAKSIMOVA, A.P.

Nematoda and Acanthocephala of wild water birds in central and  
northern Kazakhstan. Trudy Inst. zool. AN Kazakh. SSR 22:49-60  
'64. (MIRA 17:12)



BELOKOLYLENKO, V.T.; GVOZDEV, Ye.V.; MAKSIMOVA, A.P.

Helminths of water birds in Lakes Zaysan and Alakul'. Trudy Inst.  
zool. AN Kazakh. SSR 22:61-73 '64.

(MIRA 17:12)

MAKSIMOVA, A.P.

X-ray control of the pneumoperitoneum following pertubation.  
Akush. i gin. no.1:119-121 '65. (MIRA 18:10)

1. Gorodskoy roditel'nyy dom (nauchnyye rukovoditeli - prof.  
I.D. Arist i prof. I.I. Benediktorv), Chelyabinsk.

ARKHANGEL'SKIY, A.V.; MAKSIMOVA, A.V.

Case of lymphosarcoma in combination with leucosis. Vop. okh. mat. i  
det. 6 no.8:83-85 Ag '61. (MIRA 15:1)

1. Iz kafedry patologicheskoy anatomii (zav. - prof. A.M. Antonov)  
Saratovskogo meditsinskogo instituta i 1-y Detskoy infektsionnoy  
bol'nitsy (glavnyy vrach V.A. Budunova).  
(HODGKIN'S DISEASE) (LEUCOSIS)

MAKSIMOVA, A. YA.

Agricultural engineering in olive cultivation Moskva, Selkhozgiz, 1944. Mic 53-209  
Collation of the original: 207 p.

Microfilm T-4

MAKSIKOVA, A.

YA

Agrotekhnika Maslichnykh Kul'tur.

(The Agrotechnology of Growing Plants For Vegetable Oils, BY ) A. YA.

Maksimova I S. A. Gevornyants.

Moskva, Sel'Khozgiz, 1944.

207 p. Tables.

At head of title: Harkonsem SSSR VNI imk

Vegetable oils are widely used in the USSR in Industry and Home. Briefly describes portions in USSR best suited for the growing of certain types of plants; sunflowers, soya, peanuts, etc. and some of the particulars of the technology behind the growing of such plants.



**MAKSIMOVA A. YA:**

Country : USSR M  
Category : CULTIVATED PLANTS. COMMERCIAL. Oleiferous. Sugar-  
Bearing.  
Abs. Jour. : REF ZHUR-BIOL., 21, 1958, NO-96062  
Author : Semikhnenko, P.G.; Maksimova, A.Ya.  
Instit. : --  
Title : Sunflower Sowing Periods and Beds in Siberian  
Districts  
Orig. Pub. : V sb.: Maslochn. kul'tury v vost. r-nakh SSSR.  
Krasnodar, "Sov. Kuban'", 1956, 108-117  
Abstract : Mid season planting of sunflowers is practical  
on the weeded plots in Siberia; these do not  
reduce the harvest in comparison with early  
planting and make it possible to destroy the weed  
shoots by preplanting cultivation. Midwinter  
sowing can be recommended only as an expedient.  
The best space kept between the rows should be  
considered 70 cm for the sunflowers in the districts  
of Siberia. Narrower spaces do not increase the  
yield and make mechanized care difficult. In  
Card: 1/2

PUSTOVOYT, V.S., akademik, red.; SUSLOV, V.M., kand. ekon. nauk, otv. red.; ALEKSEYEVA, Ye.I., , kand. sel'khoz. nauk, red.; BUZINOV, P.A., red.; VASIL'YEV, D.S., kand. sel'khoz. nauk, red.; VOSKRESENSKAYA, G.S., red.; GUNDAYEV, A.I., red.; IGNAT'YEV, B.K., kand. sel'khoz. nauk, red.; ~~MAKSIMOVA, A.Ye., red.~~; MOSKALENKO, V.I., red.; PANCHENKO, A.Ya., red.; TIKHONOV, O.I., red.; SHPOTA, V.I., kand. sel'khoz. nauk, red.; MONOVA, Ye.S., red.; LAPSHINA, O.V., red.

[Oilseed and aromatic crops; transactions for 1912-1926]  
Maslichnye i efiromaslichnye kul'tury; trudy za 1912-1962 gg. Pod obshchei red. V.S.Pustovoita. Moskva, Sel'khozizdat, 1963. 575 p. (MIRA 17:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut maslichnykh i efiromaslichnykh kul'tur. 2. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni V.I.Lenina (for Pustovoyt). 3. Direktor.Vsesoyuznogo nauchno-issledovatel'skogo instituta maslichnykh i efiromaslichnykh kul'tur(for Suslov).



LAPP, G.B.; MAKSIMOVA, B.L.

Investigating the thermometric properties of certain metals  
and alloys of platinum group. Zhur. neorg. khim. 2 no.11:2589-2597  
N '57. (MIRA 11:3)

(Platinum group)

(Thermometry)

MAKSIMOVA, G.A.; SUKHANOV, Ye.M.

Controlling the operation of spinning pumps. Khim.volok.  
no.4:65-66 '59. (MIRA 13:2)

1. Krasnoyarskiy zavod.  
(Spinning machinery)

*M* *MAKSIMOVA, G.F.*

NIKITINA, G.G.; MAKSIMOVA, G.F.

Mechanism of action of tissue therapy. Vrach.delo no.10:1085-1086  
O '57. (MIRA 10:12)

1. Tukumskaya rayonnaya bol'nitsa Latvyskoy SSR.  
(TISSUE EXTRACTS)

27565  
S/194/61/000/005/009  
D041/D113

18.8300

AUTHORS: Levin, I.A., Candidate of Technical Sciences; Maksimova, G.F.,  
Engineer

TITLE: The effect of cold deformation on the tendency of 18-8 stain-  
less steel to intercrystalline corrosion

PERIODICAL: Khimicheskoye mashinostroyeniye, no. 5, 1961, 35-37



TEXT: A study was conducted to determine the minimum subjection time at  
temperatures of the dangerous zone which causes deformed and non-deformed  
steel to tend to intercrystalline corrosion. Three specimens of ~~OKh18N9~~  
(OKh18N9) steel and one of ~~1X18N9T~~ (1Kh18N9T) steel with a low proportion of  
titanium content in relation to carbon content, were tested. All specimens  
were treated at 1050°C for 20 minutes, and then tempered. They were deformed  
on a tensile-testing machine. The article contains only the experimental re-  
sults of 10 and 30% deformations. The resistance to intercrystalline corro-  
sion was tested by putting the specimens into a boiling standard solution con-

Card 1/2

The effect of cold deformation on ...

27565  
S/184/61/000/005/005/009  
D041/D113

taining 160 g of  $\text{CuSO}_4 \cdot 5 \text{H}_2\text{O}$  + 100 g of  $\text{H}_2\text{SO}_4$  per liter of solution and copper shavings. The following conclusions were drawn: (1) The deformation of OKh18N9 steel accelerates its tendency to intercrystalline corrosion.

(2) The deformation of lKh18N9T steel slightly slows down this tendency.

(3) The deformation of lKh18N9T steel containing 0.09% C and 0.56% Ti has no great effect on this tendency. It is pointed out that cold deformation undoubtedly produces a tendency to intercrystalline corrosion of 18-8 steel without stabilizing carbide-producing agents. An increased tempering temperature decreases the deformation effect. The most important conclusion is that deformation does not speed up the tendency of lKh18N9T steel to intercrystalline corrosion. The mechanism of the effect of titanium on the deformation effect and the mechanism of the increased tendency of 18-8 steels to intercrystalline corrosion due to cold deformation are, at present, still unexplained. There are 2 figures, 3 tables, and 9 references: 7 Soviet-bloc and 2 non-Soviet bloc references. The references to the English-language publications read as follows: E.C. Bain, R.H. Aborn, J.J. Rutherford, Trans. Amer. Soc. for Steel Treating, v. 21, 1933; H.H. Grimes, Acta metallurgica, v. 7, no 12, 1959.

Card 2/2

LEVIN, I.A.; MAKSIMOVA, G.F.

On the development of the tendency towards intercrystalline corrosion in nonstabilized stainless steels. Zhur. prikl. khim. 36 no.10:2163-2167 0 '63. (MIRA 17:1)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut neftyanogo mashinostroyeniya.

AUTHOR: Levin, I. M., Maksimova, G. F.

TITLE: Tendency toward intercrystalline corrosion in unstabilized stainless steels

CITED SOURCE: Zh. tekhn. fiz. i priklad. mashinostr., vyp. 2, 1964, 121-1.

TOPIC TAGS: stainless steel, corrosion, chroma-nickel steel, austenitic steel, grain boundary, Cr, Ni, C, chromium carbide, cold working, steel 18-8, steel 25-20

TRANSLATION: The processes which control the formation of a tendency toward intercrystalline corrosion in austenitic Cr-Ni steels 18-8 and 25-20 were studied. It was found that this process is connected with the appearance of Cr carbide in the grain boundaries. Values obtained for activation energy confirm that in some cases the activation energy reflects the process of C diffusion and in other cases the process of Cr diffusion. The effect of cold working on

Card 1/2

L 11929-65

ACCESSION NO: A-048246

speed of formation of a tendency toward intercrystalline corrosion was investigated. It was established that cold working brings about a small increase in the rate of formation of a tendency toward intercrystalline corrosion (by 1.5 to 4 times) for steel with a small activation energy, and a considerable acceleration in the rate of formation for steel with a large activation energy.

SUB CODE: MM

ENCL: 00

Card 2/2



Card 2/2



L 21118-65 EWP(m)/EWP(b)/EWA(d)/EWP(t) BSD/ASD(f)-5/ASD(m)-5 MFW/ID/WB  
ACCESSION NR: AR5000602 S/0137/64/000/008/1069/1069

SOURCE: Ref. zh. Metallurgiya. Sv. t., Abs. 61441

AUTHOR: Levin, I. A.; Maksimova, G. F.

TITLE: Effect of cold working with compression on the formation of a tendency toward intercrystalline corrosion in austenitic steels

CITED SOURCE: Tr. Gos. n.-i. i proyekt. in-t neft. mashinost., vygp. 2, 1964, 138-139

TOPIC TAGS: cold working, compression, metal corrosion, intercrystalline corrosion, austenitic steel/ steel OKh18N9

TRANSLATION: Samples of steel OKh18N9 in the form of rods 55 mm long and 18 mm in diameter, after hardening, were subjected to a compres-

TRANSDUCTION. Samples of steel cylinders 18 mm in diameter and 18 mm in diameter, after hardening, were subjected to a compression of 10% and then held for varying periods of time in the temperature interval 475-575°. The samples were then turned down to a diameter of 10 mm and subjected for 24 hrs to the action of a standard solution by the AH method (GOST 6032-56). The presence of intercrystalline corrosion was determined by the appearance of cracks

Card 1/2

ACCESSION NR: AP4043487

S/0133/64/000/008/0734/0735

AUTHOR: Levin, I. A., Maksimova, G. F., D'yakov, V. G.

TITLE: Corrosion resistance and possible uses of arc welded pipes made of steel Kh17N13M2T

SOURCE: <sup>24</sup>Stal', no. 8, 1964, 734-735

TOPIC TAGS: steel, steel Kh17N13M2T, corrosion resistance, steel corrosion, arc welded steel, steel pipe, welded steel pipe

ABSTRACT: The corrosion resistance of argon-shield arc-welded seams of pipes made of Kh17N13M2T steel, which are widely used in processes involving fatty acids, was tested to evaluate the applicability of such pipes in certain branches of the petroleum and crude oil industries. The corrosion resistance of pipes 1. annealed at 1050C as in the regular manufacturing process, 2. additionally annealed at 870C, and 3. additionally annealed at 1100C for 3 hrs. with subsequent water quenching, was determined in acetic, caproic, capric, stearic and sulfuric acids and H<sub>2</sub>S-saturated 0.03N hydrochloric acid. In addition, the weld-seam resistance to intercrystallite and point corrosion was tested in a sulfuric-acid solution of copper sulfate and by determining the protective-film failure potential in

Card 1/2

ACCESSION NR: AP4043487

0.1N sodium chloride. The results of the tests were quite satisfactory. Under all conditions, the corrosion rate of the weld seam was practically identical to that of the base metal, varying from as low as 2-30 $\mu$  to 33mm/yr. (60% H<sub>2</sub>SO<sub>4</sub>). These pipes can be recommended for use in the petroleum industry. The pipe was manufactured at the Moskovskiy trubny\*y zavod (Moscow Pipe Plant). Orig. art. has: 2 tables.

ASSOCIATION: Giproneftemash

SUBMITTED: 00

ENCL: 00

SUB CODE: FP, MM

NO REF SOV: 002

OTHER: 000

Card 2/2

These distributions are then used to find the macroscopic characteristics by means of the formulas

$$\begin{aligned} n(y, t) &= \int f(y, \bar{u}, t) d\bar{u}, \quad nV_x = \int u_x f d\bar{u}, \\ nV_y &= \int u_y f d\bar{u}, \quad n(3RT + V^2) = \int u^2 f d\bar{u}. \end{aligned} \quad (11)$$

Card 3/7

Card 6/7

L 31351-65

ACCESSION NR: AP4044457

ASSOCIATION: None

SUBMITTED: 05 Jun 63

ENCL: 00

SUB CODE: MA

NO REF SOV: 003

OTHER: 000

0

Card 7/7

PATRIKEYEV, V.V.; BALANDIN, A.A., akademik; KLABUNOVSKIY, Ye.I.; MARDASHEV,  
Yu.S.; MAKSIMOVA, G.I.

Selectivity towards optical isomers of adsorbents formed in the  
presence of bacteria. Dokl.AN SSSR '132 no.4:850-852 Je '60.  
(MIRA 13:5)

1. Institut organicheskoy khimii im. N.D.Zelinskogo Akademii nauk  
SSSR,

(Adsorbents) (Isomers)



PATRIKEYEV, V.V.; SMIRNOVA, Z.S.; MAKSIMOVA, G.I.

Some biological properties of specifically formed silica gel.  
Dokl. AN SSSR 146 no.3:707-709 S '62. (MIRA 15:10)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.  
Predstavleno akademikom A.A.Balandinym.  
(Silica)

SHARIPOV, A.Kh.; IMAYEV, M.G.; MAKSIMOVA, G.N.

Phthalic anhydride obtained by the vapor-phase oxidation of aromatic hydrocarbons from the fraction distilling at 145-250°C of a hydroforming unit. Neftekhimiia 2 no.3:359-361 My-Je '62. (MIRA 15:8)

1. Nauchno-issledovatel'skiy institut neftekhimicheskikh proizvodstv, Ufa.  
(Hydrocarbons) (Phthalic anhydride) (Petroleum--Refining)

S/152/63/000/001/002/002  
B126/B186

AUTHORS: Imayev, M. G., Sharipov, A. Kh., Fatkullina, N. S., Maksimova,  
G. N.

TITLE: Vapor-phase oxidation to phthalic anhydride of phenol extracts  
from treatment of oil fractions

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Neft' i gaz, no. 1,  
1963, 61 - 64

TEXT: Phenol extracts, waste products after treatment of oil fractions, were oxidized by atmospheric oxygen to phthalic anhydride over an industrial vanadium-potassium sulfate catalyst. Three extracts were used, one of which contained about 20.3% by weight of monocyclic, 37.8% of bicyclic and 20% of polycyclic aromatics, and the two others each about 13.6%, 26% and 35% by weight of the above aromatics, respectively. The following optimum conditions were established: oxidation temperature 380 - 390°C, ratio of air to raw material 245 : 123 g/g, volume velocity 2000 - 2500 h<sup>-1</sup>. The yield of phthalic anhydride obtained from the first extract was 28.9% by weight, from the second extract 22% and from the third 20%. To reduce coke deposition on the catalyst due to a tar content of about 3 to 5% in the phenol extracts, Card 1/2

Vapor-phase oxidation to...

S/152/63/000/001/002/002  
B126/B186

the latter were previously de-tarred by vacuum distillation. There are  
3 figures and 2 tables.

ASSOCIATION: Bashkirskiy gosudarstvennyy universitet im. 40-letiya Oktyabrya  
(Bashkirian State University imeni 40th Anniversary of the  
October Revolution); NIINeftekhim (Ufa)

SUBMITTED: April 20, 1962

Card 2/2

KAVERZNEVA, Ye.D.; MAKSIMOVA, G.N.

Fractionation of tuberculoprotein on diethylaminoethyl-cellulose.  
Biokhimiia 29 no.3:445-451 My-Je '64. (MIRA 18:4)

1. Institut organicheskoy khimii imeni Zelinskogo AN SSSR, Moskva.

MAKSIMOVA, Galina Petrovna; MOLCHANOVA, N.S., red.; VASIL'YEVA, L.P.,  
tekhn. red.

[Recommended literature on the achievements of radio electronics  
and prospects for its future development]Radioelektronika, ee  
dostizhenia i perspektivy razvitiia; rekomendatel'nyi obzor li-  
teratury, Moskva, Gos.biblioteka SSSR, im. V.I.Lenina, 1962. 23 p.  
(MIRA 15:12)

(Bibliography--Radio) (Bibliography--Electronics)

MAKSIKOVA G. V.

Aug 52

USSR/Chemistry - Radioactive Isotopes Halogens

"The Exchange Mechanism between Alkyl Halides and Metal Halides,"  
M. B. Neyman, G. V. Maksikova, and Yu. M. Shapovalov, Inst of Chem Phys  
Acad Sci USSR

"DAN SSSR" Vol 85, No 6, pp 128<sup>o</sup>-12<sup>o</sup>2

The kinetics in the exchange mechanism of halogens between an alkyl  
halide and a metal halide were studied with the aid of sodium bromide  
tagged with radioactive Br. An eq is given for calcg the rate constant  
of this exchange. Presented by Acad N. N. Semenov  
3Jun 52

238T10

MAKSIMOVA, G. V.

MAKSIMOVA, G. V.: "The use of the method of thermographic analysis to clarify the causes of the features of crystal phosphors on the basis of cadmium sulfate." Acad Sci USSR. Inst of General and Inorganic Chemistry imeni N. S. Kurnakov. Moscow, 1956. (Dissertation for the Degree of Candidate in Chemical Sciences).

SO: Knizhaya ~~iz~~etopis', No 23, 1956



"Application of Thermographic Analysis to the Clarification of Causes That Are Responsible for the Characteristics of Crystal Phosphors Based on Cadmium Sulfate," dissertation for the degree of Candidate of Chemical Sciences, by G. V. Maksimova, Physics Institute, Academy of Sciences USSR, Zhurnal Neorganicheskoy Khimii, Vol 1, No 10, Oct 56, p 2429

A detailed investigation conducted with the use of thermographic analysis and X-ray diffraction analysis has shown that: (1) changes in the properties of crystal phosphors brought about by activators are due to replacement with activator cations of atoms located at nodes of the crystal lattice (in this particular case, replacement with Mn or Pb at positions in the crystal lattice of  $CdSO_4$ ); and (2) only substances capable of existing in several metastable modifications which are close to each other in energy content at room temperature, so that mutual inter-conversion takes place, are suitable as a basis for luminophores.

Sum 1274

SOV/58-59-5-11678

Translation from: Referativnyy Zhurnal Fizika, 1959, Nr 5, p 252 (USSR)

AUTHOR: Maksimova, G.V.

TITLE: On the Factors Causing the Special Features of Cadmium Sulfate Base  
Crystal Phosphors

PERIODICAL: V sb.: Materialy 5-go Soveshchaniya po lyuminestsentsii. Kristallo-  
fosfory. 1956. Tartu, 1957, pp 197 - 205

ABSTRACT: The author detected several enantiotropic polymorphous transitions in cadmium sulfate (I). The various crystalline modifications are easily reversible. N.S. Kurnakov's pyrometer discloses five reversible thermal effects. Three crystalline modifications are possible, which are distinguished by phase inhomogeneity. The subdivision of each of these modifications into two forms is one of the reasons for the unstableness and easy changeability of luminophores. Thanks to the existence of several crystalline modifications in I, it is possible to synthesize various luminophores. The most typical luminophores are those resulting from high-temperature modifications with rapid cooling.

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SOV/58-59-5-11678

On the Factors Causing the Special Features of Cadmium Sulfate Base Crystal Phosphors

At room temperature they are in an unsteady metastable state. The nature of the crystal lattice of I is the cause of the special features of the luminophores that are based on it and renders their practical application impossible. (Fiz. in-t AS USSR).

I.S. Golub

Card 2/2

SUBJECT: USSR/Luminescence

48-5-25/56

AUTEOR: Maksimova G.V.

TITLE: On the Causes which Give Rise to Peculiarities of Crystallophosphors Based on Cadmium Sulfate (O prichinakh, obuslovlivayushchikh osobennosti kristallofosforov na osnove sul'fata kadmiya)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, 1957, Vol 21, #5, pp 688-690 (USSR)

ABSTRACT: Crystallophosphors based on cadmium sulfate were studied by the method of thermal analysis. It was discovered that cadmium sulfate can exist in several crystalline modifications. After the escape of water at 200°C, alpha-modification is formed; beta-modification is stable in the range of temperatures from 500 to 730°C; gamma-modification arises as a result of the first high-temperature effect and readily passes over into beta-modification at cooling.

On the basis of crystalline modifications of cadmium sulfate various luminophores, including  $CdSO_4-Mn$ , were synthesized, and their properties were studied.

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48-5-25/56

**TITLE:** On the Causes which Give Rise to Peculiarities of Crystallophosphors Based on Cadmium Sulfate (O prichinakh, obuslovlivayushchikh osobennosti kristallofosforov na osnove sul'fata kadmiya)

It was concluded that changes of luminophores based on cadmium sulfate, which manifested themselves in unstability and darkening after heating etc, were caused by the internal transformations of the crystalline lattice of these luminophores.

The report was followed by a discussion in which one of the speakers, Grigor'yev M.V., criticized this and other researches from the utilitarian view-point as not leading to practical results to be used by industry.

The article contains one table, one Russian reference is cited.

**INSTITUTION:** Physical Institute im. Lebedev of the USSR Academy of Sciences

**PRESENTED BY:**

**SUBMITTED:** No date indicated

**AVAILABLE:** At the Library of Congress.

Card 2/2

5(4)

SOV/78-4-3-3/34

AUTHOR:

Maksimova, G. V.

TITLE:

The Special Nature of the Crystal Structure of Cadmium Sulphate (Osobennosti kristallicheskoy struktury sul'fata kadmiya)

PERIODICAL:

Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 3, pp 506-512 (USSR)

ABSTRACT:

The polymorphous transformation of cadmium sulphate was investigated by differential-thermal, crystal-optical, X-ray-structural, and luminescence analysis. From the heating curves it has been found that cadmium sulphate forms some crystalline modifications. When cadmium sulphate is dehydrated at 800° it forms the  $\alpha$ -modification, which remains stable up to 500° and is then transformed into the  $\beta$ -modification, which remains stable up to 735° and is transformed into the  $\gamma$ -modification above 735°. The  $\alpha$ -modification is not uniform and consists of two modifications having different refraction indices:  $N = 1.635$  and  $N = 1.592$ . The thermographs of the cadmium sulphate preparations obtained by different methods reveal different crystal structures, so that they are not identical. The

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SOV/78-4-3-3/34

The Special Nature of the Crystal Structure of Cadmium Sulphate

influence of various activators (such as manganese, lead, and samarium) on the structure of cadmium sulphate has been investigated. It has been found that the activators exercise a decisive influence on the polymorphous transformation of cadmium sulphate and on its structure. Manganese stabilizes the  $\gamma$ -modification of cadmium sulphate. The  $\gamma$ -modification can easily be obtained in the presence of a manganese activator. Lead and samarium activators do not cause a difference between the  $\alpha$ - and  $\beta$ -modifications in the structure of the preparations. The spectra of the cathode luminescence of  $\text{CdSO}_4 \cdot \text{Mn}$  were recorded and are shown in figure 16. The spectra of the  $\alpha$ - and  $\beta$ -modifications are almost identical. The  $\gamma$ -modification differs from the  $\alpha$ -modification with respect to the character of the luminescence. There are 16 figures, 1 table, and 6 references, 5 of which are Soviet.

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva Akademii nauk SSSR  
(Physics Institute imeni P. N. Lebedev, Academy of Sciences,  
USSR)

SUBMITTED: December 24, 1957  
Card 2/2

S/051/60/009/004/010/034

E201/E191

AUTHORS: Osiko, V.V., and Maksimova, G.V.

TITLE: Valence of the Manganese Activator in Crystal Phosphors

PERIODICAL: Optika i spektroskopiya, 1960, Vol 9, No 4, pp 478-481

TEXT: The valence state of the manganese activator was determined in a large number of crystal phosphors. This state was obtained by a chemical method: the total content of manganese was found, as well as the content of manganese with valence greater than 2. The results are given in Table 1 (23 phosphors with the average valence of 2), Tables 2 and 3 (25 phosphors with the average valence greater than 2). These results showed that: 1) in all phosphors with green and yellow luminescence the average valence was 2; 2) phosphors with orange-red and red emission had manganese with the average valence of 2 or greater than 2; 3) there was no unique relationship between the average valence and the ionic radii or structure of the crystals.

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S/051/60/009/004/010/034  
E201/E191

Valence of the Manganese Activator in Crystal Phosphors

Acknowledgements are made to M.A. Konstantinova-Shlezinger,  
who directed this work, and to N.A. Gorbacheva, Yu.S. Leonov  
and E.Ya. Arapova for supply of the crystals.  
There are 3 tables and 2 English references.

SUBMITTED: January 15, 1960

Card 2/2



30559

15.2450

S/564/61/003/000/026/029  
D207/D304

**AUTHORS:**

Gorina, Yu. I., and Maksimova, G. V.

**TITLE:**

Growing strontium titanate monocrystals of non-stoichiometric composition by the Verneuil method

**SOURCE:**

Akademiya nauk SSSR. Institut kristallografii. Rost kristallov, v. 3, 1961, 460-462

**TEXT:**

The author describes the preparation of strontium titanate monocrystals (6 mm diameter, 30 mm length) using the Verneuil method. The color of the monocrystals depended on the type of flame used. The initial charge consisted of a mixture of  $\text{SrCO}_3$  of analytic purity and pure  $\text{TiO}_2$ . This mixture was fired in a Silit furnace at  $1400^\circ\text{C}$  for 2 hours. Strontium titanate obtained by this firing was pulverized to a mean grain size of  $0.2\mu$  and thoroughly dried. Monocrystals were grown in a tubular furnace using a mixed  $\text{H}_2 - \text{O}_2$  flame. A gas flow to the

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S/564/61/003/000/026/029  
D207/D304

Growing strontium...

flame was controlled by flowmeters of PC3 (RSZ) type. The  $H_2 / O_2$  ratio was varied from 2.1 to 3.3. The composition of the flame affected the color of monocrystals which varied from dark in hydrogen-rich flames to transparent or yellow in oxygen-rich flames. The optimum conditions were obtained in a flame with  $H_2 / O_2$  ratio of 1 : 5 as measured by flowmeters, which corresponded to true volume ratio of 2.66 : 1. The rate of crystal growth was 3 - 4 cm/hour. The maximum width of the crystal was 7 mm. Monocrystals had circular, triangular or quadrilateral cross-sections and were grown without a seed along the direction  $[100]$  or  $[111]$ . The crystals with triangular cross-section grew along the  $L_3$  axis and the quadrilateral ones along the  $L_4$  axis. Chemical and spectroscopic analyses of the monocrystals indicated an excess of  $TiO_3$  (~3%). The following impurities were also present: 0.01% Mg, 0.02% Si, 0.1% Al, 0.005% Fe, 0.01% Ca. These impurities were responsible for the light yellow color of some crystals. This work was carried out under the direction of Professor G. I. Skanavi (deceased). There are 2 figures.

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22798

S/070/61/006/003/009/009

E073/E535

24.7800(1153, 1160, 1136)

**AUTHORS:** Go:ina, Yu.I., Kashtanova, A.M., Maksimova, G.V. and Skanavi, G.I. (Deceased)

**TITLE:** Producing single crystals of strontium-titanate and some data on their dielectric properties

**PERIODICAL:** Kristallografiya, 1961, Vol.6, No.3, pp.473-475

**TEXT:** In other work the authors deal with the results of tests on growing single crystals of  $\text{SrTiO}_3$  by the method of Verneuil from a charge produced by sintering<sup>3</sup> equimolar parts of  $\text{TiO}_2$ (r) and  $\text{SrCO}_3$ . The obtained single crystals were dark-brown,  $\text{tg } \delta$  equalled 0.007 to 0.0006, Laue patterns taken after annealing for 24 hours at  $t_{\text{max}} = 1200^\circ\text{C}$  with subsequent slow cooling indicate the presence of tension and twinning. More perfect crystals were grown from charges produced by the oxalate method. In this paper the method of preparing such charges and some data on the electric properties of the produced single crystals are given. The preparation of  $\text{SrTiO}_3$  from strontium oxalate and titanate was as follows. The saturated solution of distilled  $\text{TiCl}_4$  was prepared by gradual addition of the latter to water. It was experimentally

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