

TEPINKICHIYEV, V. K.

Tepinkichiyev, V. K. - "Protective devices for the equipment of metal-cutting tools",  
Trudy Rost. n/D in-ta s.-kh. mashinostroyeniya, Issue 4, 1948, p. 45-56.

SO: U-411, 17 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 20, 1949).

TEPINKICHIYEV, V. K.

33175. Sharikovyye Predokhranitel'nyye Mufty V Metalldrezhushchikh Stankakh. Trudy Rost. N/D In-Ta S.-kh. Mashindstroyeniya , Vyp. 5 1949,, C. 63-71

SO: Istopis'zhurnal'nykh Statey, Vol. 45, Moskva, 1949

TEPINKICHIYEV, V.K.

(Vladimir Karpovich)

"Investigation of the Operation of Protective and Cut-Oyt Couplings,"  
(Dissertation), Academic degree of Doctor in Technical Sciences, based on  
his defense, 30 June 1954, in the Council of the Inst of Machine Science,  
Acad Sci USSR.

Rostov-na-Donu Inst of Agricultural Machine Building.

●-M-3, 054,778, 2 Oct 57

TEPINKICHNEV, V.K.

Safety friction plate couplings for machine tools. Vest.mash. 35  
no.11:13-17 № '55. (MLRA 9:2)  
(Machine tools) (Couplings)

TERLNEICHNIKOV, Vladimir Karpovich; ZAMANSKIY, S.M., inzhener, redaktor;  
LEUTA, V.I., redaktor izdatel'stva; BONDAR', M.P., kandidat  
tekhnicheskikh nauk, retsentsent; RUDENSKIY, Ya.V., tekhnicheskoy  
redaktor.

[Overload protectors of machine tools] Predokhranitel'nye ustroystva  
ot peregruzki stankov. Kiev, Gos.nauchno-tekhn.izd-vo mashinostroit.  
lit-ry, 1957. 137 p. (MLRA 10:6)  
(Automatic control) (Machine tools)

TEPINKICHYEV, V.K., prof., doktor tekhn. nauk, otv. red.; BLINOV, A.I.,  
tekhn. red.

[Studies of the Department "Technology of Metals"; electro-  
metallized pseudoalloys are new highly antifriction materials  
(properties, production and use)] Trudy Kafedry "Tekhnologiya  
metallov"; elektrometallizatsionnye psevdosplavy - novye vyso-  
koantifriktsionnye materialy (svoistva, poluchenie, primeneniye).  
Rostov-na-Donu, M-vo vysshego obrazovaniia SSSR, 1958. 177 p.  
(MIRA 14:5)

1. Rostov-on-Don. Institut sel'skokhozyaystvennogo mashino-  
stroyeniya.

(Bearing metals)

PHASE I BOOK EXPLOITATION

SOV/4664

Tepinkichiyev, Vladimir Karpovich

Programmnoye upravleniye stankami (Program Control of Machine Tools) [Rostov-na-Donu] Rostovskoye knizhnoye izd-vo, 1959. 74 p. 2,000 copies printed.

Ed.: G.A. Fedorova; Ed. of Publishing House: I.V. Zharebkov; Tech. Ed.: Ye.A. Abramova.

PURPOSE: This book is intended for those interested in automatic control of machine tools.

COVERAGE: The author discusses in popular form the basic principles of digital program control used in the automation of metal-cutting machine tools. To make it easier for the reader to understand the problem, the first part of the book deals with the general principles and component elements of program control systems. In the second part descriptions are given of concrete examples of the automation of machine tools of both Soviet and non-Soviet manufacture. No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

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TEPINKICHIYEV, Vladimir Karpovich, prof., doktor tekhn. nauk;  
SHUVALOV, Yu.A., kand. tekhn. nauk, dots., retsenzent;  
MOROZOVA, M.N., red. izd-va; CHERNOVA, Z.I., tekhn. red.

[Machine tools in the agricultural machinery industry] Metal-  
lovezhushchie stanki v sel'skokhoziaistvennom mashinostroenii.  
Moskva, Mashgiz, 1962. 424 p. (MIRA 15:3)  
(Machine tools) (Agricultural machinery)



TEPINKICHIYEV, V.K., prof., otv. red.; MARTYNOV, V.D., dots., red.;  
CHERTYA, N.N., st. inzh., red.; MONAKHOV, V.N., st. inzh.,  
red.; SHALCHINEV, V.A., ispol. obyazan. dots., red.;  
BABIKOV, V.V., red.

[Use of ultrasonic waves in agricultural machinery manu-  
facture] Primenenie ul'trazvuka v sel'skokhoziaistvennom  
mashinostroenii. Rostov-na-Donu, Izd-vo Rostovskogo univ.,  
1964. 157 p. (MIRA 18:3)

1. Rostov-on-Don. Institut sel'skokhozyaystvennogo mashinostroyeniya.

TEPINKICHIYEV, Vladimir Karlovich, doktor tekhn.nauk. prof.; PUSTYNNIKOV, Vasilii Grigor'yevich, kand. tekhn.nauk, dotsent; MUDRETISOV, Gennadiy Ivanovich, starshiy prepodavatel'; GLADCHENKO, Aleksandr Georgiyevich, aspirant

Electrical drive of the program control system of a vertical drilling machine. Izv.vys.ucheb.zav.; elektromekh. 8 no.9:998-1001 '65,

(MIRA 18:10)

1. Zaveduyushchiy kafedroy metallorazhushchikh stankov i instrumentov. proretok po nauchnoy rabote Rostovskogo-na-Donu instituta sel'skokhozyaystvennogo mashinostroyeniya (for Tepinkichiyev). 2. Zaveduyushchiy kafedroy elektrotekhniki Rostovskogo-na-Donu instituta sel'skokhozyaystvennogo mashinostroyeniya (for Pustynnikov). 3. Kafedra elektrotekhniki Rostovskogo-na-Donu instituta sel'skokhozyaystvennogo mashinostroyeniya (for Mudretsov, Gladchenko).

SOBESIAVSKY, C.; DUDEK, J.; TEPIA, E.

Determination of blood calcium & magnesium with a new chelatometric indicator. Cas. lek. cesk. 98 no.9:279-282 27 Feb 59.

1. C. S., Praha 2, U nemocnice 1.

(CALCIUM, in blood

determ., new chelatometric indicator method (Cx))

(MAGNESIUM, in blood

same)

Country : USSR  
Category: Soil Science Organic Fertilizers

J

Abs Jour: RZhBiol., No 14, 1958, No 63123

Author : Tepla, N.I.

Inst :           

Title : Nutrition and Productivity of Plants When Compost  
Fertilizers Have Been Applied to the Soil.

Orig Pub: S. kh. Povolzh'e, 1956, No 8, 22-25.

Abstract: No abstract.

Card : 1/1

J-58

TEPLA, N.I.

Microbiological and chemical processes in composting organic matter  
with mineral fertilizers. Agrobiologiya no.4:623-626 Jl-Ag '59.  
(MIRA 12:10)

1.Nauchno-issledovatel'skiy institut sel'skogo khozyaystva Yugo-  
Vostoka SSSR.

(Compost)

TEPLA, N.I.

Mycoflora of the reed *Phragmites communis* Trin. in Astrakhan  
Provinces. Bot. zhur. 48 no.11:1686-1692 N '63. (MIRA 17:4)

1. Nauchno-issledovatel'skiy institut po izucheniyu trostnika  
"NIISTROYKAMYSH", Astrakhan'.

BANFI, Denes (Budapest, XIV., Telepes u. 42); TEPLAN, Istvan (Budapest, XII., Kekgolyo u. 5); OTVOS, Laszlo (Budapest, II., Pusztaszeri ut 57/69)

Preparation of phthaloylglycine-1-<sup>14</sup>C and of some simple glycyl-1-<sup>14</sup>C peptides. Acta chimica Hung 35 no.2:213-216 '63.

1. "Reanal" Fine Chemical Factory, Budapest; National Atomic Energy Commission Institute of Isotopes, Budapest; Central Research Institute for Chemistry, Hungarian Academy of Sciences, Budapest.

COSTIN, M., ing.; GHEORGHE, M., ing.; CONSTANTINESCU, Elena, ing.; FORUMBOIU,  
G., ing.; BACS, I., ing.; TEPLANSKI, H., ing.

Protection of naming-board logs and keyboard timber. Ind lemruul  
14 no.7:269-273 Ji '63.



STRACIUC, Orest, ing.; TEPLANSZKY, Iuliu; GERGELY, Francisc

Evaluation of calf skins and raw hides produced in Rumania  
for obtaining higher quality of semifinished leathers. Industria  
usoara 11 no. 4:201-203 Ap '64.

TEPLANSZKY, N.

The correct use of conic disks on circular saws for cutting purposes. p.108.

INDUSTRIA LEMNULUI. (Asociatia Stiintifica a Inginerilor si Tehnicienilor din Romania si Ministerul Industriei Lemnului) Bucuresti, Rumania.  
Vol. 8, no. 3, March 1959.

Monthly List of East European Accessions (EEAI) IC, Vol. 8, no. 7, July 1959

Uncl.

**"APPROVED FOR RELEASE: 07/16/2001**

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**CIA-RDP86-00513R001755310015-3"**

APPROVED FOR RELEASE: 07/16/2001

terminated by the length of time the electrode was in the electrolyte, and by the temp-  
erature of the electrolyte, which was 70°C.

BABENKO, Dem'yan Alekseyevich; TEPLENKO, Saira Isakovna; CHIBISHEV,  
Leonid Dmitriyevich; MARSHAK, Ye. L., retsenzent; RUBO, L.G.,  
red.; BOKUNOV, N.I., tekhn. red.

[Manual for electricians and armature winders working on  
three-phase asynchronous electric motors] V pomoshch'  
elektriku-obmotchiku trekhfaznykh asinkhronnykh elektro-  
dvigatelei. Moskva, Gosenergoizdat, 1962. 174 p.

(MIRA 15:9)

(Electric motors, Induction--Repairing)  
(Electricians--Handbooks, manuals, etc.)

BABENKO, Demyan Alekseyevich; SEPLENKO, Sarra Isaakovna;  
CHIBISHEV, Leonid Dmitriyevich; TSIBULEVSKIY, P.I.,  
red.

[Electrician's manual on the winding of asynchronous  
electric motors] V pomoshch' elektriku-obmotchiku asin-  
khronnykh elektrodvigatelei. Moskva, Energiia, 1965. 255 p.  
(MIRA 18:8)

TEPLENKO, V. A.

137-58-5-8782

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 8 (USSR)

AUTHOR: Teplenko, V. A.

TITLE: Magnetic Roasting of Iron Ores (Magnetiziruyushchiy obzhig zheleznykh rud)

PERIODICAL: Tr. Tekhn. soveshchaniya po obzhigu materialov v kipyash-chem sloye. Moscow, Metallurgizdat, 1956, pp 127-148

ABSTRACT: A furnace of the TsNIChM type for magnetic roasting of suspended Fe ore particles is described, together with its basic operating principles and results of its operation under laboratory and industrial conditions. The bottom of a rectangular pilot-plant furnace, with internal dimensions of 4.0x0.5 m, is equipped with triangular depressions. Ground ore is blown from the first depression into the second and so on by means of streams of air mixed with flue gases emanating from tuyeres installed on the bottom of these depressions at an angle of 70°. Thus the ore is roasted while being in suspension. The complete roasting installation consists of the furnace, a recuperator, a dust collector, blowers, and automatic control devices. Exposed to temperatures between 300° and 640°C, in the course

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137-58-5-8782

### Magnetic Roasting of Iron Ores

of the roasting process, the ore is dried, (5-8 sec), fired, and oxidized to a magnetic oxide,  $\text{Fe} (\gamma\text{-Fe}_2\text{O}_3)$ . After 20-25 seconds spent in the furnace 97 percent of Fe in the ore becomes ferric oxide, while the content of ferrous oxide does not exceed 1.7 percent. After roasting, the ore is subjected to magnetic concentration, and the content of Fe increases by approximately 10 percent (from 40-43 percent to 48-53 percent and from 49-50 percent to 58-59 percent) at an extraction of 80-95 percent. Daily output of the furnace varies between 4 and 6  $\text{t/m}^3$ , the consumption of gas being 5-8 percent in terms of a top-grade fuel.

A. Sh.

1. Iron ores--Processing
2. Furnaces--Operation

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**CIA-RDP86-00513R001755310015-3**

**APPROVED FOR RELEASE: 07/16/2001**

**CIA-RDP86-00513R001755310015-3"**

S/137/62/000/006/027/163  
A006/A101

AUTHORS: Timoshenko, N. N., Borok, B. A., Teplenko V. G., Solov'yeva, Z. V.

TITLE: Metallurgical processing of ilmenite concentrate and titanium-magnetites for the purpose of obtaining iron powder and a product with high titanium content

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 6, 1962, 13, abstract 6G93  
(In collection "Titan i yego splavy", no. 5, Moscow, AN SSSR, 1961, 69 - 74)

TEXT: The technical scheme of processing ilmenite concentrate consists of the following operations: 1) crushing and mixing the charge, composed of ilmenite concentrate with 10% admixture of a solid reducing agent (carbon, carbon black, thermotails) and NaCl, added in a 20% amount of the ilmenite concentrate; 2) reduction in a furnace with any type of heating at 1,150°C; 3) discharge and grinding of the cake until -170+200 mesh particle size; 4) wet magnetic separation with repeated demagnetization of the Fe powder (weak magnetic field: 900 oersteds); 5) washing from salt and drying a) of the magnetic fraction at 40 - 60°C; b) of

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Metallurgical processing of...

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A006/A101

the titanous product at 150 - 200°C; 6) if needed, additional reduction of Fe-powder in H flow at 650 - 700°C. The system was tested with titanium-magnetite ore and Fe-powder was obtained containing 96% Fe;  $TiO_2$  extraction into the non-magnetic portion was 80%, and  $V_2O_5$  extraction attained up to 83%.

L. Vorob'yeva

[Abstracter's note: Complete translation]

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S/0137/64/000/001/0039/0040

ACCESSION NR: AR4018321

SOURCE: RZh. Metallurgiya, Abs. 10273

AUTHOR: Borok, B. A.; Tepenko, V. G.; Solov'yeva, Z. V.; Rautova, N. P.

TITLE: Basic principles and technology of production of powder alloys

CITED SOURCE: Tr. Kuybyshevsk. aviats. in-t, vy\*p. 16, 1963, 23-30

TOPIC TAGS: powder alloy production, oxide powder production, steel powder production

TRANSLATION: A description is given of a method for the preparation of multicomponent alloys via joint reduction of a mixture of component oxides by Ca hydride, e.g.,  $nCr_2O_3 + mNiO + pFe_2O_3 + sTiO_2 + kCaH \rightarrow 2nCr \cdot mNi \cdot 2pFe \cdot sTi \cdot kCaO + H_2$ , where  $k = 3n + 2m + 3p + 2s$ . The alloys obtained are homogeneous in composition and crystal structure and are in exact agreement with the corresponding phase diagrams. Metal powders can be added to the charge along with the oxides in order to decrease the exothermic effect. A selective reduction of the oxide mixtures takes place in conformity with their free energies of formation at comparatively low temperatures (600-800°C). At higher temperatures, the oxides react with one another to form complex oxides and

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ACCESSION NR: AR4018321

their reduction by  $\text{CaH}_2$  follows a complex course.  $\text{CaO}$  formed during reduction acts as a separator which prevents the particles from sintering. When the  $\text{CaO}$  content of the reaction products is insufficient to eliminate sintering, an additional amount of  $\text{CaO}$  is added to the charge.  $\text{NaCl}$  can also be used as the separator.  $\text{CaO}$  is removed from the final product by quenching with water and subsequent treatment with a dilute  $\text{HCl}$  solution, washing the  $\text{CaCl}_2$  off with water, and drying the powder in vacuum desiccators. The method described is used in the production of powders of stainless steels 1Kh18N9T, 1Kh17N2, 0Kh18N9, nichromes Kh20N80 and Kh25N75, and other alloys. V. Meshpor

SUB CODE: MM

ENCL: 00

Card 2/2

ACCESSION NR: AP4040471

S/0226/64/000/003/0050/0063

AUTHOR: Borok, B. A.; Shchegoleva, R. P.; Golubava, L. S.;  
Teplenko, V. G.; Reutova, N. P.; Ruch'yeva, N. A.

TITLE: Properties and microstructure of sintered Kh18N15 stainless  
steel made by joint reduction method

SOURCE: Poroshkovaya metallurgiya, no. 3 (21), 1964, 50-63

TOPIC TAGS: stainless steel, sintered stainless steel, carbonyl  
iron, sintered steel property, steel corrosion resistance, sintered  
steel structure

ABSTRACT: Investigations have been made of the properties of  
sintered Kh18N15 chromium-nickel stainless steel made from powder  
produced by the joint reduction of chromium and nickel oxides  
mixed with iron powders (Process A) and of steel made from mechani-  
cally mixed powders of carbonyl iron, reduced chromium, and electro-  
lytic nickel (Process B). It was found that the density of compacts  
A was lower than that of B, but the latter had a very low compression  
strength. Adequate fluidity of powders and strength of compacts

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ACCESSION NR: AP4040471

make powder A a very suitable material for rolling porous strips and sheets in continuous rolling mills. Compacts B sinter more easily than compacts A, but they are much more susceptible to oxidation during the sintering. Compacts A, sintered at 1350C for 10 hr; had a density of 96—97% (compared to 71—85% for compacts B), tensile strength 47.8—53.5 dan/mm<sup>2</sup>, elongation 29.2—43.4% and impact toughness (unnotched specimens) 19.8—29 kgm/cm<sup>2</sup>. Sintered Kh18N15 steel has an austenitic structure with a low content of finely dispersed carbides. In the annealed state the steel has a high corrosion resistance; its corrosion rate in boiling 65% nitric acid is 0.1 g/m<sup>2</sup> · hr compared to 0.2 g/m<sup>2</sup> · hr for conventionally made X18H15. This is explained by a low content of impurities in powder A. Orig. art. has: 8 tables and 9 figures.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii (Central Scientific Research Institute of Ferrous Metallurgy)

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ACCESSION NR: AP4040471

SUBMITTED: 16Feb63

DATE ACQ: 06Ju164

ENCL: 00

SUB CODE: MM

NO REF SOV: 011

OTHER: 005

Cord 3/3



L 2924-66 EWP(e)/EWI(m)/ENP(1)/ENA(d)/EWP(t)/ENP(z)/ENP(b) IJP(c) JD/JH/JG

ACCESSION NR: AT5022890

UR/2776/65/000/043/0069/0080

AUTHOR: Borok, B. A.; Teplenko, V. G.

TITLE: Production of the powders of alloys and steels by means of the combined reduction of oxide mixtures by calcium hydride

SOURCE: Moscow, Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii. Sbornik trudov, no. 43, 1965. Poroshkovaya metallurgiya (Powder metallurgy), 69-80

TOPIC TAGS: metal oxide reduction, stainless steel, powder alloy, oxide formation, calcium oxide

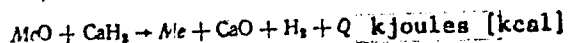
ABSTRACT: The powders of Al, Ti, B, Nb, and other metals with a low content of impurities can be successfully produced by reducing their oxides only if an active reducing agent with a high loss of the free energy of oxide formation is used (e.g., Ca, Mn, or Na). Such an agent should not form any alloys or chemical compounds with the reduced metal, and the reaction products (CaO, MgO, etc.) should be easily separated by some known technique of mechanical or chemical concentration. These requirements are completely met by metallic calcium. The free

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ACCESSION NR: AT 5022890

energy of formation and heat of formation of the oxide of Ca (CaO) are higher than for the other suitable reducing agents known. Since, however, the use of metallic Ca for this purpose presents certain practical difficulties, as well as the danger of ignition and explosion, calcium hydride CaH<sub>2</sub> is used instead. Then the reduction of the oxides of metals follows the reaction:



As experiments have shown, it is expedient to prepare the charge partly from metal powders and partly from metal oxides. This serves to reduce the thermal effect of the reaction and the expenditure of expensive CaH<sub>2</sub>. Thus, for example, the powder of 1Kh18N9T stainless steel (72% Fe, 18% Cr, 9% Ni, 1% Ti) is prepared by reacting with CaH<sub>2</sub> a mixture of Fe powder (base), ferric oxide, nickel oxide, chromium oxide, and titanium dioxide. The total amount of oxygen is 13% by weight. The amount of CaH<sub>2</sub> should be such as to assure complete combination with oxygen to form CaO, with an excess of 10%. Increasing the reduction temperature from 700 to 1200°C causes oxygen content of the obtained 1Kh18N9T powder to decrease to 0.09% from 4.64%. Micro- and macrostructural examination of the

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sintered billets (diameter up to 180 mm and mass (weight) up to 100 kg) obtained from the powder of different multi-component steels and alloys established that, by contrast with ingots of analogous compositions, they have a fine-grained homogeneous structure and hence are satisfactorily deformable. Thus, with the aid of  $\text{CaH}_2$ , it is now possible to use powder-metallurgical techniques in the production of steels and alloys of a complex composition, containing alloy elements with a high thermodynamic activity (e.g. Al, Ti, Cr, Si, Nb). Orig. art. has: 3 figures, 5 tables, 3 formulas

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MM

NO REF SOV: 009

OTHER: 002

CC

Card 3/3

L 2681-66 EWT(m)/EWP(e)/EWA(d)/ENP(t)/EWP(k)/EWP(z)/EWP(b) IJP(c) JD/HW

ACCESSION NR: AT5022894

UR/2776/65/000/043/0115/0118

42

AUTHOR: Teplenko, V. G.; Solov'yeva, Z. V.; Makshantseva, G. T.

40

B+1

TITLE: Investigation of the possibility of obtaining stellite powder

SOURCE: Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallur-  
gii. Sbornik trudov, no. 43, 1965. Poroshkovaya metallurgiya (Powder metallurgy),

44,55/115-118

44,55/16

TOPIC TAGS: stellite, powder metal production, cobalt containing alloy,  
sintering

27

ABSTRACT: Despite their outstanding physical properties, stellites have a limited range of applications, since their high hardness makes it impossible to machine them with cutting tools. This can be remedied in some cases (e.g. in the fabrication of gas-turbine parts, dies, etc.) by means of investment casting, but this is a highly expensive and wasteful technique. Hence, to find a better solution, the authors investigated the possibility of fabricating stellite parts by powder-metallurgical methods. Stellite powder containing 0.91% C, 2.2% Si, 27.5% Cr, 4.2% W, 61.8% Co, 3.3% Fe, was prepared by the method of the combined reduction

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L 2681-56

ACCESSION NR: AT5022894

2

of oxides with  $\text{CaH}_2$ , in the presence of  $\text{Cr}_3\text{C}_2$  as the source of C, at 1100-1150°C, for 4-5 hr, in a stainless steel retort. The resulting sinter was pulverized to 0.2 mm particle size and then "slaked" with water. The pulp thus obtained was treated with weak HCl (pH = 3) and the resulting stellite powder was washed with water and alcohol and vacuum-dried at 40-50°C. X-ray micrographic analysis revealed the presence of a solid solution based on cobalt and a carbide phase ( $\text{Cr}_3\text{C}_2$  and complex carbides). The powder particles are represented by porous granules with a strongly ramified rough surface (mean pour weight: 2.0 g/cm<sup>2</sup>). Such stellite powder is easily pressed without requiring the addition of grease or plasticizing agents. The density of sintered (at 1280-1300°C, in vacuum and hydrogen atmospheres) briquets of the stellite powder is close to the values characteristic of cast stellite (the density of the stellite obtained by melting the powder is 8.29 g/cm<sup>3</sup>); residual porosity does not exceed 9%; hardness is 43-44 HRC, which is of the same order as that of cast stellite. Orig. art. has: 3 tables.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MM, 12

NO REF SOV: 005

OTHER: 001

Card

2/2

L 2682-56 EWT(m)/EPF(c)/EWP(t)/EWP(b) IJP(c) JD

ACCESSION NR: AT5022897

UR/2776/65/000/0043/0135/0139

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AUTHOR: Teplenko, V. G.; Kudinova, K. G.; Shishkhanov, T. S.

TITLE: Production technology of the hydrides of titanium and calcium

SOURCE: Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metal-  
lurgii. Sbornik trudov, no. 43, 1965. Poroshkovaya metallurgiya (Powder metal-  
lurgy), 135-139

TOPIC TAGS: hydride, titanium, calcium, powder metallurgy, hydrogen

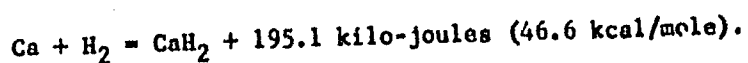
ABSTRACT: Techniques for the production of  $\text{CaH}_2$  and  $\text{TiH}_2$ , developed by the Laboratory of Powder Metallurgy, Central Scientific Research Institute of Ferrous Metallurgy, are described. Normally,  $\text{CaH}_2$  is produced in the following sequence: crushing of 45-50 kg blocks of double-distilled calcium metal into small (~150 mm) lumps of arbitrary shape by means of a 50-ton hydraulic press; charging of these lumps (which weight ~2 kg each) into a stainless steel retort which is then hermetically covered; evacuation of air from the retort, connection of the retort to a water supply line via a rotameter; and placement of the retort in a furnace heated to 600°C. Within 30-40 min afterward the period of rapid

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absorption of hydrogen by calcium sets in, following the reaction:



Since the reaction between Ca and H<sub>2</sub> is known to occur more completely at 300-400°C than at 800°C, the temperature of saturation with H<sub>2</sub> was experimentally reduced to 400-500°C on directly charging the entire calcium-metal block into the retort without first crushing the calcium. To reduce the amount of fused CaH<sub>2</sub>, the consumption of H<sub>2</sub> in the subsequent experiments was lowered to 1.5 m<sup>3</sup>/hr. Ultimately, it was thus found possible to increase the yield of acceptable CaH<sub>2</sub> to 98%, while increasing the burden per retort to two 45-50 kg blocks of Ca metal. This new technique dispenses with the preliminary crushing of Ca blocks. As for TiH<sub>2</sub> it is produced with the same equipment as above. The titanium subjected to saturation with H<sub>2</sub> is taken in the form of either powder or sponge (wastes of the thermal reduction of magnosium). It was experimentally established that the process of the saturation of Ti with H<sub>2</sub> in the furnace can be safely reduced from 6 to 1 hr and, further, that adjusting the saturation temperature to 500°C and the rate of delivery of hydrogen to 4 m<sup>3</sup>/hr makes it possible greatly to increase

Card 2/3

L 2682-66

ACCESSION NR: AT5022897

furnace productivity and reduce power consumption. Orig. art. has: 3 tables.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MM, YE

NO REF SOV: 006

OTHER: 001

*KE*  
3/3  
Card



L 2851-66 EMP(s)/EWT(m)/T/EWP(t)/EMP(k)/EMP(z)/EMP(b)/EWA(c) LJP(c) JD/HW  
 UR/2776/65/000/043/0169/0172  
 ACCESSION NR: AT5022903

AUTHOR: Teplenko, V. G.; Reutova, N. P.; Sokolov, V. I.; Krasnykh, V. I.

TITLE: Production of high-purity iron and of alloys based on this iron

SOURCE: Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metal-  
 lurgii. Sbornik trudov, no. 43, 1965. Poroshkovaya metallurgiya (Powder metal-  
 lurgy), 169-172

TOPIC TAGS: high purity metal, metal purification, carbonyl iron, iron powder,  
 electric furnace, metal pressing

ABSTRACT: Since the properties of a number of special alloys, given the current  
 techniques of production, are chiefly determined by the purity of the raw mate-  
 rials used, their preparation requires highly pure iron containing at least  
 99.96% Fe<sup>total</sup>, 0.001-0.002% C and less than 0.004% S. The use of highly pure  
 charge as well as improvements in the smelting process have currently made pos-  
 sible the production of iron of 99.8-99.9% purity (armco iron, Swedish iron) by  
 means of conventional metallurgical techniques. Moreover, pure iron in powdered  
 form is obtained on an industrial scale by electrolysis or by the carbonyl method.

Card 1/3

L 2851-66

ACCESSION NR: AT5022903

6

Carbonyl iron is distinguished by its virtually nil content of metal impurities but it is relatively highly contaminated with carbon, oxygen, and nitrogen due to the secondary processes occurring between the active particles of iron and the gaseous phase. In this connection, the authors describe the procedure they developed for refining low-grade carbonyl iron powder (0.85-1.0% C, 0.75% N, 0.6% O) by means of vertical electric furnaces with a hydrogen atmosphere so as to obtain ultra-fine iron sponge containing 0.001-0.002% C, less than 0.004% S and N, traces of P, and 0.01% O. Specimens of this refined carbonyl iron, prepared by powder-metallurgical techniques (hydrostatic pressing<sup>15,16</sup> at 1000 atm, sintering of the obtained 500-600 g briquets in a hydrogen atmosphere with a dew point of -30°C at 1400°C for 14 hr, forging at 1000-700°C into rods of 16 mm diameter which were rolled into standard specimens for tensile tests and resistivity measurements), displayed high plastic properties and a lower resistivity (0.743 ohm-mm<sup>2</sup>/m) than commercial pure iron (0.0971 ohm-mm<sup>2</sup>/m). The use of this type of refined iron in place of armco iron in the smelting of precision steels yields alloys with magnetic properties that are 1.5-2.0 times as high. In addition, this may lead to the development of new alloys with special physical properties, since this highly pure iron has already been utilized to develop monocrystals of Co-Fe alloys and Ni-Fe alloys as well as in the production of ultra-pure wire contain-

17

Card 2/3

L 2851-66

ACCESSION NR: AT5022903

ing less than 0.005% C, which has made it possible to solve the problem of regulating the gaseous phase during case-hardening. Orig. art. has: 4 tables.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MM

NO REF SOV: 004

OTHER: 000

High Pressure

QVK

3/3

Card

TEPLI, MaroJan, inż.

Remarks concerning voltage decrease computing. Przegl kolej  
elektrotech 13 no.6:172-175 Je '61.

TEPLI, Marchan, inz.

Pressing of cable ends and clips. Przegł kolej elektrotechn 13  
no.11:330-332 '61.

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755310015-3

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755310015-3"

**"APPROVED FOR RELEASE: 07/16/2001**

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"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755310015-3

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APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755310015-3"



PENTIN, Yu.A.; TRUBNIKOV, I.S.; TEPLINSKAYA, R.B.; SHUSHERINA, N.P.  
LEVINA, R.Ya.

Structure of  $\delta$ -keto acids. Dokl. AN SSSR 139 no.5:1121-1123  
Ag. '61. (MIRA 14:8)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.  
Predstavleno akademikom A.N. Nesmeyanovym.  
(Acids, Organic)

PENTIN, Yu.A.; TRUBNIKOV, I.S.; TEPLINSKAYA, R.B.; SHUSHERINA, N.P.;  
IEVINA, R.Ya.

Infrared spectra and structure of solid  $\delta$ -ketonic acids. Zhur.ob.-  
khim. 32 no.6:1927-1933 Je '62. (MIRA 15:6)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.  
(Acids, Organic--Spectra)

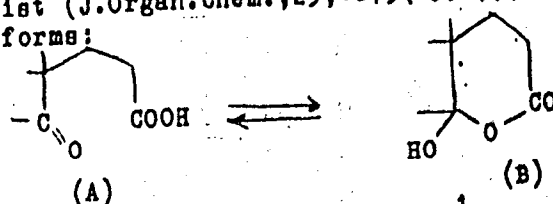
S/048/63/027/001/020/043  
B106/B101

AUTHORS: Pentin, Yu. A., Trubnikov, I. S., Teplinakaya, R. B.,  
Shushchagina, N. P., and Levina, R. Ya.

TITLE: Infrared spectra and the structure of  $\delta$ -keto acids

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya,  
v. 27, no. 1, 1963, 55-58

TEXT: IR spectra were taken in order to study the structures of five liquid and some crystalline  $\delta$ -keto acids which, according to J. Cason and E.J. Reist (J.Organ.Chem., 23, 1675 (1958)), may exist in two tautomeric forms:



Spectrum analyses in the  $3600 - 2000 \text{ cm}^{-1}$  region (stretching vibrations)

Card 1/3

Infrared spectra and the ...

S/048/63/027/001/020/043  
B106/B101

of OH of the carboxyl group at  $3200 - 3000 \text{ cm}^{-1}$ ) and  $1800 - 700 \text{ cm}^{-1}$  region (characteristic absorption bands of the carboxyl group) showed liquid and crystalline  $\delta$ -keto acids to exist in the open-chain keto structure A, since an absorption characteristic of the lactole form (at  $\sim 3200 \text{ cm}^{-1}$ ) was not observed. Liquid  $\delta$ -keto acids (e.g.  $\text{CH}_3\text{COCH}(\text{i-C}_3\text{H}_7)\text{CH}_2\text{CH}_2\text{COOH}$ ) are associated. A study of mixtures of a  $\delta$ -keto acid with acetophenone-o-carboxylic acid having lactole structure showed that this structure becomes noticeable at a 3% content and clearly visible at 5% by an intensive  $3300 \text{ cm}^{-1}$  band. In a solution of carbon tetrachloride or chloroform the  $\delta$ -keto acids ( $\gamma$ -acetyl butyric acid,  $\gamma$ -benzoyl butyric acid,  $\gamma$ -benzoyl pelargonic acid) as well as  $\gamma$ -keto acids (levulinic acid,  $\beta$ -benzoyl propionic acid) occur in the open-chain form, since there is no absorption either in the  $3400 - 3200 \text{ cm}^{-1}$  or in the  $3600 - 3550 \text{ cm}^{-1}$  regions (stretching vibrations of OH of the hydroxylactone form of keto acids). In concentrated solutions,  $\delta$ -keto acids are dimerized; the content of the monomeric form increases as the concentration decreases. There are 2 figures.

Card 2/3

Infrared spectra and the ...

S/048/63/027/001/020/043  
B106/B101

ASSOCIATION: Moskovskiy gos. universitet im. M.V. Lomonosova  
(Moscow State University imeni M.V. Lomonosov)

Card 3/3

TRUBNIKOV, I.S.; TEPLINSKAYA, R.B.; PENTIN, Yu.A.; SHUSHERINA, N.P.;  
LEVINA, R.Ya.

Absorption spectra and structure of keto acids in solutions. Zhur.ob.  
khim. 33 no.4:1210-1214 Ap '63. (MIRA 16:5)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.  
(Acids, Organic—Spectra) (Ketones)

TEPLINSKAYA, T.K.; FEDOROVA, N.N.; ROZENTSVEYG, S.A.

Nature of the product of the second anodic process on the iron  
electrode of an alkaline accumulator. Zhur. fiz. khim. 38  
no.9:2176-2181 S '64. (MIRA 17:12)

1. Nauchno-issledovatel'skiy akkumulyatornyy institut, Leningrad.

**"APPROVED FOR RELEASE: 07/16/2001**

**CIA-RDP86-00513R001755310015-3**

**APPROVED FOR RELEASE: 07/16/2001**

**CIA-RDP86-00513R001755310015-3"**



MAL'TSEV, M.V.; TEPLINSKAYA, V.M.; STEPANOVA, M.V.

Neutralizing the harmful effect of lead in copper and brasses.

TSvet, met. 29 no.7:68-72 J1 '56.

(MLRA 9:10)

(Copper-Metallography) (Brass--Metallography) (Lead)

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755310015-3

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755310015-3"

96000(1024,1067,1099)

S/115/60/000/011/008/013  
B019/B058

AUTHORS: Rozhdestvenskaya, T. B. and Teplinskiy, A. M.

TITLE: Electrothermal Comparator for Measuring Small Alternating Currents and Checkup of Microammeters

PERIODICAL: Izmeritel'naya tekhnika, 1960, No. 11, pp. 41 - 44

TEXT: A prototype of an electrothermal comparator of the type ТЭКФ-1 (TEKF-1) was developed at the VNIIM imeni D. I. Mendeleyev in 1959. It permits the measurement of alternating currents of 20 microamperes with an error of  $\pm(0.3 - 0.5)\%$ . The comparator consists of a sensitive thermoconverter of the type ТБЕ-1 (TVB-1), which is manufactured in series. It produces a thermo-emf of 2.5 millivolts at a current of 1 microampere. The heater of the thermoconverter is connected in an a.c. circuit, the thermo-emf is amplified by a photoamplifier and indicated by a galvanometer. The reading value produced with this circuit from the alternating current to be measured is subsequently adjusted by d.c. The d.c. values being known, the a.c. can be measured accurately by comparison. To

Card 1/2

85741

Electrothermal Comparator for Measuring Small Alternating Currents and Checkup of Micro-ammeters S/115/60/000/011/008/013  
B019/B058

increase the sensitivity, a photocompensation amplifier produced by the "Vibrator" plant is used in this comparator. The sensitivity of the comparator is 8 mm/microampere at a minimum current of 20 microamperes. It follows from the error investigation that in the range of 20 to 200,000 cycles the error amounts to a maximum of  $\pm 0.3\%$  for current measurements above 50 microamperes and to a maximum of  $\pm 0.5\%$  below 50 microamperes. There are 2 figures and 4 references: 3 Soviet and 1 US. ✓

Card 2/2

8/058/62/000/003/007/092  
A061/A101

9.2/100

AUTHOR: Teplinskiy, A. M.

TITLE: Measurement of low alternating currents with preheating thermistors

PERIODICAL: Referativnyy zhurnal, Fizika, no. 3, 1962, 11-12, abstract 3A126  
("Tr. in-tov Kom-ta standartov, mer i izmerit. priborov pri Sov.  
Min. SSSR, 1961, no. 52 (112), 110-122)

TEXT: A comparator has been developed which permits alternating currents from 20  $\mu$ a to 20 ma to be compared with equivalent direct currents. Thus, DC can be measured instead of AC, which is much simpler. The comparator consists of a two-arm bridge to which thermistors are connected. One of the thermistors serves as the reference element, while the second compensates the influence of external temperature. The heating element of the "operating" thermistor is alternately connected to the a-c and the d-c circuit, and, provided the bridge equilibrium is not disturbed, the actual current values may be considered to be equal. Special 20 - 100  $\mu$ a miniature thermistors have been developed with the following parameters: heated resistor, 25 - 30 kilohms; resistance of the cold thermistor, 2.5 - 5 kilohms; length of the resistor body, 2.5 mm, diameter

Card 1/2

Measurement of low alternating currents ...

S/058/62/000/003/007/092  
A061/A101

0.18 mm. Their characteristics are indicated, and the errors of the method are estimated; they do not exceed 0.2% between 50 and 50,000 cps for currents from 50  $\mu$ a to 20 ma, and 0.4% for currents less than 50  $\mu$ a.

K. Shirokov

[Abstracter's note: Complete translation]

Card 2/2

9.2200 (1001, 1089, 1331)

34927

S/115/62/000/004/004/007  
E194/E154

AUTHOR: Teplinskiy, A.M.

TITLE: A sensitive transducer for measuring small  
alternating current

PERIODICAL: Izmeritel'naya tekhnika, no.4, 1962, 22-23

TEXT: Thermoelectric and thermistor transducers in common use are not sensitive enough to measure alternating currents below 1 - 3 mA. In the VNIIM imeni D.I. Mendeleev the author, together with S.V. Luzgin of the Fiziko-tekhnicheskiy institut AN SSSR (Physicotechnical Institute AS USSR) has developed new types of sensitive thermoelectric and thermistor transducers for measuring alternating currents below 1 mA. The transducer consists of a glass vessel containing a heater and a sensitive element. The heat element is a mechanical mixture of fine grained carbon black and epoxide resin in the form of a film 0.01-0.02 mm thick deposited on the outer surface of a glass tube. The sensing element, inside the glass tube, is a thermocouple or a thermistor. The free space between the glass

Card 1/3

A sensitive transducer for ...

S/115/62/000/004/004/007  
E194/E154

tube and the sensing element is filled with bakelite varnish. The non-metallic heaters are small (2.5 mm long, 0.2 mm in diameter) and of high resistance (up to 30 000 ohms) and so the instrument is unusually sensitive. When a thermocouple is used as a sensing element, the sensitivity is 16 times better than in a conventional instrument with metallic filament heater. If a thermistor is used in place of the thermocouple the sensitivity is 60 ohms percent which is 6000 times better than that of a conventional instrument. Accordingly, the new instrument can be used to measure alternating currents down to 20 microamps with an error not exceeding 0.2-0.3% using a substitution method, i.e. comparing a.c. current heating with the heating effect of a known d.c. current. Arrangements made to correct for variations in ambient temperature are explained. Long-term instability of the non-metallic heaters does not matter because measurements last only 2 - 3 minutes. The upper frequency limit depends on the value of stray capacitance and the resulting error is of the order of 0.1% at frequencies above 100 kc/s. Non-metallic resistors have the disadvantage of

Card 2/3



A sensitive transducer for ...

S/115/62/000/004/004/007  
E194/E154

being sensitive to overload. The glass vessel is evacuated to  $10^{-4}$  mm Hg, which increases the sensitivity. The ambient temperature may be stabilised by enclosing the vessel in an oil bath. To extend the range beyond 100 microamps the transducers are shunted with non-metallic resistors and this does not cause appreciable error at frequencies of up to 100 kc/s.

There are 3 figures

Card 3/3

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755310015-3

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755310015-3"

**"APPROVED FOR RELEASE: 07/16/2001**

**CIA-RDP86-00513R001755310015-3**

**APPROVED FOR RELEASE: 07/16/2001**

**CIA-RDP86-00513R001755310015-3"**

TEPLITS, I.V.

Differentiating the Kaufman-Wolf Epidermophyton and Rubrophyton  
(Epidermophyton rubrum). Lab. delo 3 no.2:49-50 Mr-Apr '57  
(MLRA 10:5)

1. Iz mikologicheskogo otdela (zav.-pfof. A.M. Ariyevich) TSentral'-  
nogo kozhno-venerologicheskogo instituta i kafedry kozhnykh i  
venericheskikh bolezney (zav.-prof. M.M. Zheltakov) II Moskovskogo  
meditsinskogo instituta imeni I.V. Stalina.  
(DERMATOPHYTES)

TEPLITS, N.A.

Assimilation of amino acids found in food by silkworm moth caterpillars under the conditions of increased temperature. Nauch. dokl. vys. shkoly; biol. nauki no.2:76-78 '62. (MIRA 15:5)

1. Rekomendovana Institutom morfologii zhivotnykh im. A.N.Severtsova AN SSSR.

(SILKWORMS) (AMINO ACID METABOLISM)  
(TEMPERATURE—PHYSIOLOGICAL EFFECT)

23841

27.1220 also 1565

S/020/61/138/002/024/024  
3103/2220

AUTHORS: Polezhayev, L. V., Teplits, N. A., and Yermakova, N. I.

TITLE: Restoration of the regenerative power of the extremities of Axolotls, which had been suppressed by X-ray irradiation, by means of proteins, nucleic acids, and lyophilic tissues

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 138, no. 2, 1961, 477-480

TEXT: The aim of the paper was to clarify whether: 1) the regenerative power suppressed by exposure to X-rays is restored by the injections still to be mentioned, 2) the irradiation effect may be overcome by fresh homogenates of blood-forming organs. Axolotls of black and white breed were tested. They were narcotized in the water by means of ether and then exposed in the X-ray apparatus РУП-200 (RUP-200) to a dose of 7000 r (intensity of dose 636 r/min) for 11 min. In case 1) the hind legs, the body being screened off, in case 2) the whole body (dose: 1000 r, intensity of dose 50 r/min) were irradiated. Case 1) 16 to 18 days after irradiation, both hind legs were amputated at the distal part of the tibia. 15 control animals received no further treatment. The remaining Axolotls

Card 1/6

23841

J

S/020/61/138/002/024/024  
B103/B220

Restoration of the regenerative power.

were treated with injections of 1 ml of the preparation concerned as suspension or solution in 0.65 % physiologic sodium chloride solution for cold-blooded animals applied into the right hind leg or into the muscles of the back. The solvent for acid protein consisted of: KCl 1 g, NaCl 1 g,  $K_2HPO_4$  5 g,  $H_2O$  1000 ml. Case 2) The preparations were injected at the same places, but two days after irradiation. Production of the preparations in case 1): Lyophile tissues in test tubes were frozen at  $-78^{\circ}C$  in a mixture of dry ice and alcohol and dried for 48 hr in the vacuum at  $-78^{\circ}$  and at  $-10^{\circ}C$  to room temperature: liver 2.5 g, spleen 1.0 g, thigh muscles 2.5 g, skin of rats (shaved and cleaned with alcohol) as well as red bone marrow of rabbits 0.3 g. The test tubes containing the dried tissue were sealed and a weighed portion was pulverized before use and mixed with 10.0 ml of the mentioned sodium chloride solution. Fractions of liver cell nuclei were prepared according to the modified method of Shovo (Ref. 2: G. P. Georgiyev et al., Biokhimiya, 25, 318, 1960), ribonucleic acid (RNA) and deoxy ribonucleic acid (DNA) according to the phenol method (Ref. 1); they were free of protein. The acid protein contained neither RNA nor DNA. Production of preparations in case 2):

Card 2/6

23841

S/020/61/138/002/024/024

B103/B220

Restoration of the regenerative power...

Tissues forthcoming from liver and spleen of rabbits were pulverized in a mortar and injections of 1.0 ml were applied immediately to the experimental animals. These contained: raw substance of liver 0.1 g, of spleen and red bone marrow 0.03 g each. All preparations were injected for 7 days with daily single doses of: nuclei 0.013 g, DNA 0.002 g, RNA 0.003 g, liver protein 0.11 g, acid protein 0.01 g. The authors studied the modifications produced in the tissues by the above preparations. A regeneration of legs with 5 and 4 toes was regarded as typical, the formation of misshaped legs with 3 or 2 toes as atypical. The formation of conical protuberances, knolls or an uncomplicated cicatrization were considered as missing regeneration. The results are represented in Table 1. The authors state that in this case, contrary to their former experiments and due to inexplicable reasons, the regenerative power of the legs was not suppressed completely by 7000 r, although the difference between test and control was sometimes sufficiently evident. In the second part of the test (case 1), the legs of the control animals were amputated again. This time, the regenerative power was restored in 56.7 % of the cases spontaneously without any additional treatment, whereas after the first amputation 13.3 % of regenerations were found.

Card 3/6



Restoration of the regenerative power...

S/020/238/002/024/024  
B103/B220

The most effective means to restore the regenerative power of irradiated legs were found to be: after the first amputation: RNA, then proteins, and finally lyophilic muscles; after the second amputation: proteins, RNA, lyophilic muscles, and finally spleen. DNA, cell nuclei, and further preparations were ineffective. Thus, the authors conclude that RNA and proteins play a different role in the various stages of the restoration of the regenerative power. In case 2), no success was achieved. The animals grew thin, ate little, were taken ill with Saprolegnia, and finally perished after 1-1.5 months. Intensive degeneration of liver and spleen showed the typical symptoms of irradiation disease. No differences were perceptible between the control and the experimental animals. There are 1 figure, 1 table, and 11 references: 8 Soviet-bloc and 3 non-Soviet-bloc. The reference to the English-language publication reads as follows:  
Ref. 10: M. G. Sevag, D. B. Zackmann, J. Smolenz. J. Biol. Chem., 124, 425 (1938).

ASSOCIATION: Institut morfologii zhivotnykh im. A. N. Severtsova Akademii nauk SSSR (Institute of Animal Morphology imeni A. N. Severtsov, Academy of Sciences USSR)

Card 4/6

27 2000  
S/020/62/144/004/024/024  
B144/B138

AUTHORS: Polezhayev, L. V., Teplits, N. A., and Tuchkova, S. Ya.

TITLE: Significance of proteins and ribonucleic acids in the restoration of the x ray-inhibited regenerative capacity of limbs in axolotls

PERIODICAL: . Akademiya nauk SSSR. Doklady, v. 144, no. 4, 1962, 930-933

TEXT: This study deals with 4 problems: I) Role of RNA, DNA, and proteins (P) in the regeneration of the limbs of axolotls (A) after irradiation and in the prevention of x-ray ulcers; II) effect of prophylactic RNA and P administration on the regenerative capacity; III) time of optimum effect; IV) effect on radiation disease. There were two test series: a) Local irradiation of the hind limbs with 10,000 r and subsequent amputation, and b) whole-body irradiation with 1000 r. Both included numerous groups with individual or combined administration of RNA, DNA, liver P, and acid P after or before amputation (in a) or irradiation (in b). 90 days after amputation the locally irradiated A were subjected to reamputation. I: Treatment with RNA and P, respectively, after amputation resulted in 33%

Card 1/3

S/020/62/144/004/024/024  
B144/B138

# Significance of proteins and...

and 22% regeneration (controls 5%); these percentages increased to 92% and 84% after reamputation (controls 55%). After RNA + acid P 100% regeneration was observed. Necroses and x-ray ulcers developed in 75 - 100% of the controls; after amputation + treatment they were prevented only on regenerating limbs; after reamputation no ulcers were observed. RNA is much more effective than P, since it is more readily incorporated in the irradiated tissue, the RNA content of which is 130  $\times$  per 100 g dry weight as against 400  $\gamma$  in normal tissue. II: RNA administration before irradiation has little effect. Irradiated animals treated with liver P and RNA, whose limbs were amputated two months later, showed no and 100% regeneration, respectively. III: Optimum RNA effect 3 months after injection in all cases. IV: With whole-body irradiation, prophylactic doses of RNA and acid P retarded the dying of A and increased their resistance to Saprolegnia, whereas these preparations accelerated their death when administered after irradiation. There are 1 figure and 1 table.

ASSOCIATION: Institut morfologii zhivotnykh im. A. N. Severtsova Akademii nauk SSSR (Institute of Animal Morphology imeni A. N. Severtsov of the Academy of Sciences USSR)

Card 2/3

Significance of proteins and...

S/020/62/144/004/024/024  
B144/B138

PRESENTED: December 29, 1961, by A. N. Bakulev, Academician

SUBMITTED: December 12, 1961

Card 3/3

42548

S/020/62/147/001/022/022  
B144/B101

27/210

AUTHOR: Teplits, N. A.

TITLE: Change in content of nucleic acids in the limbs of axolotls after x-ray irradiation and restoration of the regenerative capacity

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 147, no. 1, 1962, 244 - 247

TEXT: The RNA and DNA contents in tissues were studied in 2158 axolotls. 12 - 15 cm in length, after local irradiation of the hind legs with a total dose of 7000 and 10,000 r. The experiments included amputation 15 - 20 days after irradiation, a second and third amputation of regenerating and non-regenerating limbs with intervals of 90 days each, and simultaneous administration into one hind limb of 125  $\mu$ g RNA, 85  $\mu$ g DNA, 27.5 mg liver protein or 13 mg liver nuclei (either pure or with remnants of cytoplasm) from rats, 10 mg acid protein, lyophilized muscle (250 mg) or spleen (100 mg) or bone marrow (30 mg), or combinations of these. Without biopreparations, the content of RNA, determined after the second amputation, dropped from 400 to 230  $\mu$ g and that of DNA from 240 to 190  $\mu$ g (per Card 1/2

Change in content of nucleic ...

S/020/62/147/001/022/022  
B144/B101

100 mg weight on a wet basis). Almost normal values were found in the regenerates. In tests with acid protein, the differences between the regenerating and the non-regenerating contralateral stump were 419 to 314  $\mu$ g for RNA and 262 to 192  $\mu$ g for DNA. A particularly high content of nucleic acids was detected when liver nuclei or lyophilized tissues were administered. Evidently x-ray irradiation inhibits the biosynthesis of proteins and nucleic acids. This can be prevented by treatment with some biopreparations which restore the regenerative capacity. There is 1 table.

ASSOCIATION: Institut morfologii zhivotnykh im. A. N. Severtsova Akademii nauk SSSR (Institute of Animal Morphology imeni A. N. Severtsov of the Academy of Sciences USSR)

PRESENTED: April 27, 1962, by A. N. Bakulev, Academician

SUBMITTED: April 27, 1962

Card 2/2

POLEZHAYEV, L.V.; TEPLITS, N.A.; TUCHKOVA, S. Ya.

Restoration of the regenerative ability of axolotl extremities,  
inhibited by X-ray irradiation, with the help of nucleic acids.  
Dokl. AN SSSR 159 no.3:682-685 N '64 (MIRA 18:1)

1. Institut morfologii zhivotnykh im. A.N. Severtsova AN SSSR.  
Predstavleno akademikom A.N. Bakulevym.

L 10825-61 EMT(m)/EDS/ES(b)--AFPTC/ASD--K

ACCESSION NR: AP3000760

S/0020/63/150/003/0694/0697

AUTHOR: Polezhayev, L. V.: Teplits, N. A.: Tuckova, S. Ya.

TITLE: Regeneration ability of axolotl extremities after X-ray irradiation

SOURCE: AN SSSR. Doklady, v. 150, no. 3, 1963, 694-697

TOPIC TAGS: amputation trauma, ribonucleic acid, desoxyribonucleic acid, regeneration ability, radiation disease

ABSTRACT: The authors investigated the following in this study: (i) does the regeneration percentage of irradiated extremities increase after repeated amputations on account of the effect of the amputation trauma or does it increase on account of the time factor, in the course of which the irradiated tissues are normalized by the non-irradiated tissues and internal humoral media, (ii) which ribonucleic acid is effective: highly-polymeric, freshly-prepared, or one that has been stored for a long time prior to use, (iii) is desoxyribonucleic acid active, (iv) is it necessary to treat the irradiated animals one or more times with the preparations so that the regenerative effect could be attained, (v) how effective is ribonucleic acid in the fight against radiation disease. Authors conclude that the amputation trauma is appreciable and the time factor does not have too great a

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1. 10825-63

ACCESSION NR: AP3000760

bearing on the establishment of regenerative capability of the axolotl's extremities which were suppressed by X-ray irradiation. The biological activity of laboratory-prepared highly-polymeric ribonucleic acid is reduced during prolonged storage. Commercial ribonucleic acid and deoxyribonucleic acid are not biologically-active. The regenerative ability which was suppressed by irradiation can be restored only with a single treatment of the animals with specific doses of ribonucleic acid and albumen. The medicinal and especially prophylactic treatment of the animals with ribonucleic acid increases their resistance and increases their life span by 37% in the case of radiation disease. Orig. art. has: 1 table.

ASSOCIATION: Institut morfologii zhivotnykh im. A. N. Severtsova, akademii nauk SSSR (Institute of Animal Morphology, Academy of Sciences SSSR)

SUBMITTED: 26Nov62

DATE ACQD: 21Jun63

ENCL: 00

SUB CODE: 00

NO REF SOV: 008

OTHER: 001

1b/ur  
Card 2/2

ACCESSION NR: AP4040963

8/0020/64/156/005/1207/1209

AUTHOR: Teplits, N. A.

TITLE: Dynamics of changes of nucleic acid content with X-ray irradiation, inhibition and restoration of recuperative capabilities of axoloti extremities

SOURCE: AN SSSR. Doklady\*, v. 156, no. 5, 1964, 1207-1209

TOPIC TACS: ribonucleic acid, desoxyribonucleic acid, axoloti, nucleic acid, desoxyribonucleic acid, biophysics, X-ray irradiation

ABSTRACT: Author attempted to establish the dynamics of changes in the content of nucleic acids (ribonucleic and desoxyribonucleic) in the extremity tissues of axoloti after their amputation: (1) under controlled conditions and without irradiation, when the extremities recover; (2) after irradiating the extremities by X-ray irradiation with doses of 8000 and 1000 rads, which caused inhibition of their recuperative ability; (3) after irradiating the extremities with the same dose and reducing the inhibited recuperative ability by treating the animals with ribonucleic acid. The experiments were carried out on 230 8 to 10 month old black breed axoloti with a body length of 12 to 15 cm. They were narcotized in water with either and irradiated without a filter or an RUP-1 X-ray machine. The

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ACCESSION NR: AP4040963

RNA and DNA content in the animal extremities was determined through 10 periods: 1, 3, 5, 7, 10, 15, 20, 30, 50 and 100 days after amputation. Findings are completely tabulated. Biochemical research showed that RNA content changes regularly. In the control series, the RNA content in the tissues increases sharply in the first 3 to 7 days after amputation on account of decomposition of the injured cells and tissues as well as by their being infiltrated with hematogenic elements. In the case of the test series with irradiation, the RNA content through the day following amputation increases and exceeds the norm. The DNA content in all series changes regularly and uniformly. The DNA content in the extremity tissues is very insignificant and substantially below normal in the first day after operation. It can be surmised that period of DNA accumulation in the tissues of the recuperating extremities, beginning 20 days after amputation, is associated with a period of increased mitotic activity. Orig. art. has: 1 table.

ASSOCIATION: Institut morfologii zhivotnykh im. A. N. Severtsova Akademii nauk SSSR (Institute of Animal Morphology, Academy of Sciences, SSSR)

SUBMITTED: 28Jun63

ENCL: 00

SUB CODE: LS  
Card 2/2

NO REF SOV: 009

OTHER: 002

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755310015-3

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APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755310015-3"

ACC NR: AR6028908

SOURCE CODE: UR/0299/66/000/007/M030/M030

AUTHOR: Teplits, N. A.

TITLE: Nuclein variation related to X-irradiation-induced suppression of the regenerative capacities of axoloti extremities and nuclein exchange variation related to experimental regeneration

SOURCE: Ref. zh. Biologiya, Part II, Abs. 7M188

REF SOURCE: Sb. Mekhanizmy biol. deystviya ionizir. izlucheniya. L'vov, L'vovsk. un-t, 1965, 159-161

TOPIC TAGS: experimental regeneration, <sup>RAY</sup>x<sub>A</sub> radiation biologic effect, radiation tissue effect, RNA, DNA

ABSTRACT:

Radiation doses of 8000 r have been shown to hinder regeneration of limbs in axolotls and to reduce RNA and DNA concentration in nonamputated extremities. An injection of RNA from irradiated animals with amputations results in increased RNA in tissue-culture cells. In control cells (irradiation and regeneration without an injection of RNA), RNA concentration drops from the 7th day after amputation until the 100th day of observation, but in the experimental

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UDC: 591.169



ACC NR: AR6028908

cells, RNA concentration drops only for 20—30 days, then gradually increases, sometimes exceeding the amount characteristic for regenerating tissues of nonirradiated axolotls. Only at a later period does the RNA concentration drop lower than that of regenerating tissues of nonirradiated axolotls. [WA-50; CBE No.11]

SUB CODE: 06/ SUBM DATE: none/

Card 2/2

7--1175, V. V.

12813. Yablenik, P. S., Severov, A. A. i Tselits, V. V. Lechyaniya konverrei  
marchhin penitsillinov. Sbornik nauch. Trudov (Kirovsk, gos. ped. inst). T.  
IV, 1949, s. 115-19

80: Letopis' Zhurnal'nykh Statey, Vol. 44, Moskva, 1949

VEP... V.V.

FUNGUS INFECTIONS

"Research on the Mycoses of Feet Encountered in Kirgizia", by V.V. Teplits, Sovetskoye Zdravookhraneniye Kirgizii, No 3, May-June 1957, pp 38-42.

No significant research has been conducted in the Kirgiz SSR either on the morbidity of individuals suffering from mycosis or on its mor-  
bific agent.

Recent examinations in the city of Frunze have shown that 2.7% of the urban inhabitants and 0.07% of the rural population suffer from diseases caused by fungi; the intertriginous form of mycosis is pre-  
valent. The morbidic agents of this disease are said to be Epidermo-  
phyton inguinale, Epidermophyton Kaufman-Wolf, and Epidermophyton ru-  
brum.

The low morbidity of fungus affections in the Kirgiz SSR does not  
exclude the possibility of a future spreading of these infection and,  
therefore, immediate sanitary and prophylactic measures are to be taken.

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- 35 -

TEPLITS, V.V., kand.med.nauk

Culture medium for the detection of pigments in cultures of  
Epidermophyton rubrum [with summary in English]. Vest.derm. i ven.  
31 no.6:21-23 N-D '57. (MIRA 11:3)

1. Iz mikologicheskogo otdela (zav. - prof. A.M.Ariyevich)  
TSentral'nogo kozhno-venerologicheskogo instituta (dir. N.M.Turanov)  
i kafedry kozhnykh bolezney (zav. - prof. M.M.Zhel'takov) II Moskov-  
skogo gosudarstvennogo meditsinskogo instituta imeni N.I.Pirogova  
(dir. - prof. O.V.Kerbikov)

(EPIDERMOPHYTON, culture

isolation of pigment in culture of red epidermophyton on  
corn or soy-bean flour)

(CULTURE MEDIA

corn or soy-bean flour medium for isolation of pigment in  
culture of red epidermophyton)

(PIGMENTS,

isolation in culture of red epidermophyton, use of corn  
or soy-bean flour as culture medium)

TEPLITS, V.V.

Cultural characteristics of the agents of mycosis of the foot in  
Kirghizistan. Sov.zdrav.Kir. no.2:40-41 Kr-Ap '58. (MIRA 12:12)

1. Iz mikologicheskogo otdela (zav. - prof. A.K. Ariyevich) Tsentral'-  
nogo kozhno-venerologicheskogo instituta i kafedry kozhnykh bolezney  
(zav. - prof. M.M. Zheltakov) II Moskovskogo meditsinskogo instituta.  
(KIRGHIZISTAN--MYCOSIS) (FOOT--DISEASES)

TEPLITS, V.V.

Nonfungal diseases of the foot. Sov.zdrav.Kir. no.2:37-40 Mr-Apr  
'63. (MIRA 16:5)

1. Iz kafedry kozhnykh bolezney (zav. - dotsent V.V. Teplits)  
Kirgizskogo gosudarstvennogo meditsinskogo instituta.  
(FOOT--DISEASES)

TEPLITS, V.V.; PANKRATOVA, L.S.

Coccidioidomycosis in Kirghizia. Vest.derm. i ven. 38 no.5:80-83  
My '64. (MIRA 18:12)

1. Kafedra kozhnykh bolezney (zav. - dotsent V.V.Teplits) i  
kafedra mikrobiologii (zav. - dotsent Sh.Yu.Al'dzhambayev)  
Kirguzskogo meditsinskogo instituta. Submitted June 29, 1963.

ARIYEVICH, A.M., prof.; TYUFILINA, O.V., kand. med. nauk; TEPLITS, V.V.,  
kand. med. nauk; STEPANISHCHEVA, Z.G., doktor biologicheskikh nauk

Gummatous ulcerative cephalosporiosis of the leg. Vest.  
derm. i ven. 38 no.8:73-76 Ag '64. (MIRA 18:8)

1. Mikologicheskii otdel (zav.- prof. A.M. Ariyevich)  
TSentral'nogo kozhno-venerologicheskogo instituta (dir.-  
dotsent N.M. Turanov) Ministerstva zdravookhraneniya SSSR,  
Moskva.



1. TEPLITSKAYA, A. M.
2. USSR (600)
7. "The Microflora of Pickled Salmon Caviar", Izvestiya Tikhookeanskogo Nauch.-Issled. In-ta Rybnogo Khoz-va i Okeanografii (News of the Pacific Ocean Science-Research Institute of the Fish Industry and Oceanography), Vol 34, 1951, pp 215-221.
9. Mikrobiologiya, Vol XXI, Issue 1, Moscow, Jan-Feb 1952, pp 121-132.  
Unclassified.

TEPLITSKAYA, A.M.; SHMEL'KOVA, L.P.; PEREPLETCHIK, R.R., spetsred.; ITSKO-  
VICH, V.A., red.; FORMALINA, Ye.A., tekhn. red.

[Use of biomycin in the fishing industry] Opyt primeneniia bio-  
mitsina v rybnoi promyshlennosti. Moskva, izd-vo zhurnala "Ryb-  
noe khoziaistvo" VNIRO, 1960. 22 p. (MIRA 14:10)

1. Tikhookeanskiy nauchno-issledovatel'skiy institut morskogo ryb-  
nogo khozyaystva i okeanografii (for Teplitskaya, Shmel'kova).  
(Aureomycin) (Fishery products—Preservation)

18.8100,18.9200

77709  
SOV/148-60-1-32/34

AUTHORS: Shivrin, O. N., Teplitskaya, E. L.

TITLE: X-Ray Scattering in Deformed Tungsten

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Chernaya metallurgiya, 1960, Nr 1, pp 180-182 (USSR)

ABSTRACT: Continuing their previous studies (Izvestiya VUZ MVO, Fizika, in print) in which the structure of powdered tungsten had been investigated using copper radiation, hardly suitable for the detection of "3d-type distortions" (Abstracter's Note: No definition is given; the expression is likely to mean rotation twinning in deformed crystals), the authors carried out additional experiments using shortwave Mo radiation. The X-ray diffraction photographs of tungsten powder, compressed into plates, were taken with camera RKE at 25 and 40° angles between the plates and incident beam. Four photographs were taken from either position. The mean diffraction intensities from eight reflecting planes,

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X-Ray Scattering in Deformed Tungsten

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the sums of squared indices of which were 6, 8, 10, 14, 18, 26, 30, and 38, furnished the experimental values of atomic scattering functions  $f_{\text{exp}}$ . The

values were close to  $f_T$ , computed according to Thomas-Fermi, except for those  $f_{\text{exp}}$  obtained from low-index reflecting planes. In the latter case, the somewhat decreased experimental values, and lower  $f_{\text{exp}}:f$  ratio

(see Fig. 1) are an effect of primary extinctions. The ratio is close to 1 when the crystals are parted into blocks whose  $D = 5 \cdot 10^{-5}$  cm. "3rd-type distortions" would have decreased the ratio with the increased Miller indices of the reflecting planes. Since this is not the case, the experiments with Mo radiation confirm the authors' earlier conclusion that no "3rd-type distortions" occur in powdered tungsten. There is 1 figure; and 9 references, 5 Soviet, 2 U.K., 1 U.S., 1 Czechoslovakian. The U.K. and U.S. references are: R. I. Weiss, Proc. Phys. Soc., B 65, 391, 553, 1952; A. R. Lang, Proc. Phys. Soc., B 66, 408, 1003,

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