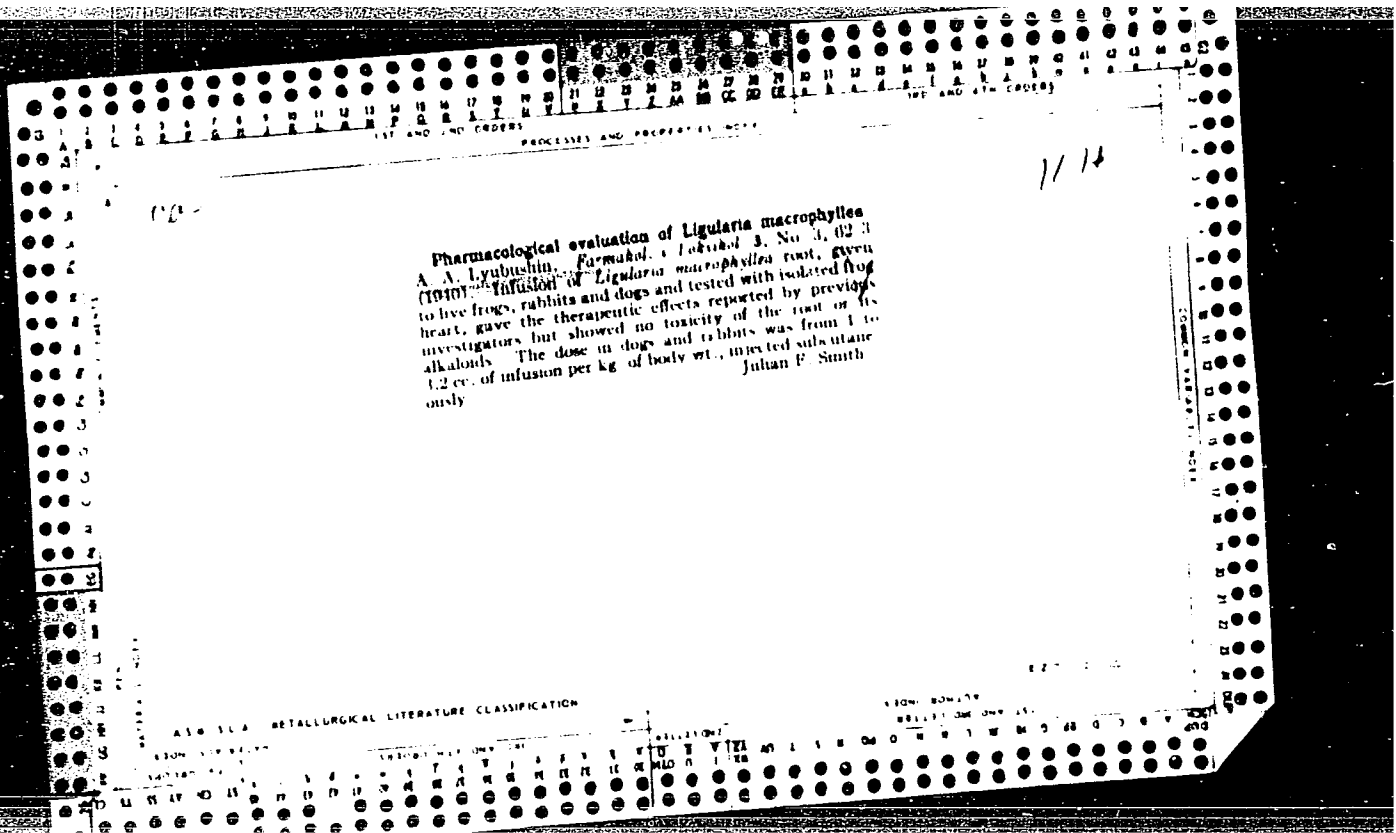
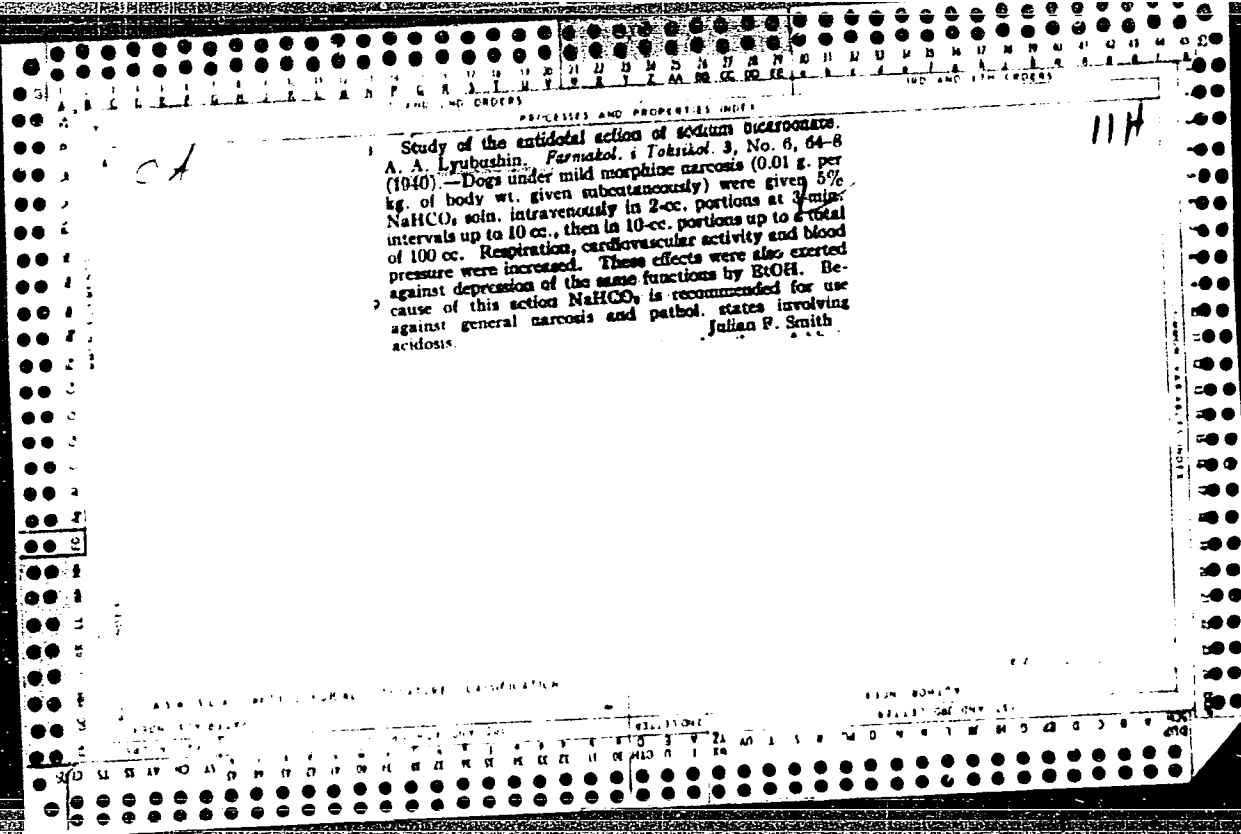


LYUBUSHIN, Aleksandr Alekseyevich, prof.; ROMANENKO, V.P., red.;
KARPYUK, L.I., tekhn.red.

[Medicine and religion] Meditsina i religia. Orenburg,
Orenburgskoe knizhnoe izd-vo, 1959. 23 p. (MIRA 13:6)
(Medicine and religion)





11-H

Pharmacology of Eremosparton aphyllum A. A. Lyubushin (Kazakh Republic Psychiatric Hosp., Kzyl Ordya) *Farmakol. i Toksikol.* 9, No. 2, 30 (1970).

Eremosparton aphyllum is a poisonous plant growing in Kazakhstan. Parts above the roots are rich in alkaloids. The ext. (I) (1:10) in Ringer soln. (dose 25 g/kg) causes rigidity, motor nerve stimulation, and intensified reflexes in frogs. A dose of 100 g/kg kills frogs in 1-2 hrs. by paralyzing the central nervous system, though muscles and peripheral nerves remain excitable. Isolated frog heart, perfused with more dil. (1:100) I, shows increased amplitude without change of rhythm; at 1:20 or 1:10 there is a neg. chronotropic action, with decreased amplitude and cardiac failure in diastole. Intravenous injection of I (1:10) in decerebrated dogs (dose 1-2 g/kg) slows respiration, lowers blood pressure, and raises pulse rate. In 5 tests with human digits (isolated by the Kravkov method) perfusion with I (1:1000) caused a prolonged vasoconstrictor effect. Thus it appears that lowered blood pressure in dogs is due to selective action on the vasomotor centers, not to cardiac depression nor to peripheral action on the vessel walls.

Julian F. Smith

ASB 31.4 METALLOGRAPHIC LITERATURE CLASSIFICATION

LYUBUSHIN, A.A.

Comparative evaluation of toxicity of aqueous and alcohol extracts
from hibernated panic grass and from culture of *Fusarium*. Tr. Vsesoiuz.
obsh. fiziol. no. 1:119-120 1952. (GLML 24:1)

1. Delivered 3 March 1949, Chkalov.

LYUBUSHIN, A.A.

(Aleksander Alekseyevich)

"Some Experimental Data on the Problem of Intravenous Infusion of Sodium Bicarbonate," (Dissertation), Academic degree of Doctor of Medical Sciences, based on his defense, 1 March 1954, in the Council of the Second Moscow State Medical Inst im. Stalin.

Chkalov State Medical Inst.

M- 3, 054, 778, 2 Oct 57

Translation from: Referativnyy zhurnal, Geologiya, 1987, Nr 3,
p 178 (USSR)

15-1007-0-3018

AUTHOR: Lyubushin, A. A.

TITLE: The Mineral Waters of Buguruslan (Buguruslanskiye mineral'nyye vody)

PERIODICAL: Vestnik Chkalovsk. otd Vses. khim. o-va im. D. I. Mendeleeva, 1956, Nr 5, pp 61-66

ABSTRACT: The mineral waters of the Buguruslan region may be divided into two groups according to the depths at which the aquifers occur. In the first, the waters have a comparatively low mineralization (0.5 to 2.0 g/liter) and are of the sodium-calcium-magnesium-bicarbonate-chlorite type, with large quantities of hydrogen sulfide (200 to 600 mg/liter). The waters of the Buguruslan district belong to this group. The second group consists of deep mineral waters (2200 to 3000 m). The mineralization of these waters, which

Card 1/2

The Mineral Waters of Buguruslan

15-1987-3-3714

occur in Devonian strata, reaches 112 to 245 g/liter. The waters are of the oily sodium-calcium-chloride type. They contain large quantities of bromium and, in places, small quantities of iodine. They are not radioactive. Analyses were made on the material from a number of wells, the waters of which are being considered for utilization. The most suitable waters for medicinal purposes are of the slightly mineralized hydrogen-sulfide type.

Card 2/2

S. M. A.

LYUBUSHIN, A.A. (Moskva)

Recurrent leiomyoma of the skin. Arkh. pat. no.10:57-59 '64.
(MIRA 18:10)

1. Patologoanatomicheskaya laboratoriya (zav. A.M. Vakhurkina)
TSentral'noy klinicheskoy rentgeno-radiologicheskoy bol'nitsy
(nachal'nik A.I. Yur'yev) Ministerstva putey soobshcheniya.

LYUBUSHIN, B. A. (Manager) and BARANOVSKIY, I. V. (Head of the Disinfectional Detachment, Rava-Russkaya Inter-Raion Veterinary Laboratory L'vov Oblast').

"Utilization of liquid fuel in the work with Komarov's Disinfectional installation (DUK)."

Veterinariya, Vol. 38, No. 3, 1961, p. 72.

LYUBUSHKIN, G.

AUTHOR: Lyubushkin, G., Absolute World Record Holder ^{85-10-3/35}

TITLE: Above the Absolute World Record (Vyshe absolyutnogo mirovogo rekorda)

PERIODICAL: Kryl'ya Rodiny, 1957, Nr 10, p. 3 (USSR)

ABSTRACT: The author of this short item describes his airplane model, which attained the altitude of 5,103 m and thus established a new world record. This model is equipped with a K-16 engine. The flight of this model was observed by the sports commissars from two airplanes, Yak-18 and An-2. This item is illustrated by a photograph of its author, holding his model.

AVAILABLE: Library of Congress

LYUBUSHKIN, V. , kand.tekhn.nauk

Schematics of corn grinding and germ separating systems. Muk.-elev.
prom. 28 no.6:14-17 Je '62. (MIRA 15:7)

1. Moskovskiy tekhnologicheskii institut pishchevoy promyshlennosti.
(Corn (Maize)) (Grain milling machinery)

LYUBUSHKIN, V., kand.tekhn.nauk

New systems of corn milling. Muk.-elev. prom. 27 no.4:12-15
Ap '61. (MIRA 14:7)

1. Moskovskiy tekhnologicheskij institut pishchevoy promyshlennosti.
(Corn milling)

LYUBUSHKIN, V. T.

Dissertation: "Investigation of the process of separating Geol in the treatment of
Corn." Card Tech Sci, Moscow Technological Inst of the Food Industry, 17 May 54.
Vechernyaya Moskva, Moscow, 1954.

CC: SUM 194, 14 Nov 1954

ZHIGALOV, A.N., kand. ekon. nauk; CHUKHAR'KO, Z.T., kand. ekon. nauk,
retsensent; LYUBUSHKIN, V.T., kand. tekhn. nauk, spetsred.;
FUKS, V.K., red.; KISINA, Ye.I., tekhn. red.

[Utilization of the capital assents of state-owned rural mills]
Ispol'zovanie osnovnykh fondov gosudarstvennykh sel'skokhoziaistven-
nykh mel'nits. Moskva, Pishchepromizdat, 1958. 122 p. (MIRA 11:8)
(Flour mills)

LYURUSHKIN, V.^T; kand.tekhn.nauk

Milling based on collision of grain particles at supersonic speed.
Muk.-elev. prem. 24 no.7:21-23 J1 '58. (MIRA 11:10)

1. Moskovskiy tekhnologicheskij institut pishchevoy promyshlennosti.
(Grain milling)

LYUBUSHKIN, V.T.; SAKHIYEV, I.S.; ARUTYUNOVA, L.S.

Physical properties of corn flakes. *Izv. vys. ucheb. zav.;*
pishch. tekh. no.6:46-47 '63. (MIRA 17:3)

1. Moskovskiy tekhnologicheskij institut pishchevoy promysh-
lennosti, kafedra promyshlennoy pererabotki kukuruzy.

KAZAKOV, Ye. D.; LYUBUSHKIN, V. T.; KAZAKOVA, A. F.

Linear dimensions of ear kernels and their variability. Izv. vys.
shkol. zap.; biokh. tekhnol. 2:16-18 '64. (MIRA 17:5)

1. Mosk. gos. tekhnologicheskii institut pishchevoy promyshlennosti,
kafedra promyshlennoy pererabotki kukuruzy i kafedra biokh. i
i zernovedeniya.

ROZANOV, V. G., kand. tekhn. nauk; LYUBUSHKIN, V. V.

Selecting optimum characteristics of a pneumatic drive for
automobile-train brakes. Avt. prom. 28 no.6:25-28 Je '62.
(MIRA 16:4)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni
nauchno-issledovatel'skiy avtomobil'nyy i avtomotorny institut.

(Automobile trains—Brakes)

LYUBUSHKIN, V.V.; ROZANOV, V.G., kand.tekhn.nauk

Improving a braking system with pneumatic driving. Avt.prom. 29
no.9:26-28 S '63. (MIRA 16:9)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo
Znameni nauchno-issledovatel'skiy avtomobil'nyy i avtomotorny
institut.

(Motor vehicles—Brakes)

PASHKANG, K.V.; VASIL'YEVA, I.V.; LYUBUSHKINA, S.G.; LAPKINA, N.A.

Landform study of a state farm territory for agricultural purposes. Vest. Mosk. un. Ser. 5: Geog. 17 no.4:6-14 J1-Ag '62. (MIRA 16:1)

1. Geografo-biologicheskii fakul'tet Moskovskogo gosudarstvennogo pedagogicheskogo instituta imeni V.I.Lenina.
(Kaluga Province—Landforms)

RYABCHIKOV, A.M.; LYUBUSHKINA, S.G.

All-Union scientific methodological conference of academic
geographers. Vest. Mosk. un. Ser. biol., pochv., geol.,
geog. 13 no.2:271-275 '58. (MIRA 11:9)
(Geography--Congresses)

LYUBUSHKINA, S.G.

The Bryansk-Zhizdra "poles'e." Vest. Mosk. un. Ser.5: Geog. 16
no. 3:69-71 My-Je '61. (MIRA 14:5)
(Bolva Valley—Landforms) (Zhizdra Valley—Landforms)

GVOZDETSKIY, N.A., prof.; ZHUCHKOVA, V.K., dots.; ALISOV, B.P., prof.;
VASIL'YEVA, I.V., dots.; VARLAMOVA, M.N., tekhnik-kartograf;
DOLGOVA, L.S., dots.; ZVORYKIN, K.V., st. nauchnyy sotr.;
ZEMTSOVA, A.I., assistent; IVANOVA, T.N.; LEBEDEV, N.P., st.
prepodavatel'; LYUBUSHKINA, S.G.; NESMEYANOVA, G.Ya., mlad.
nauchnyy sotr.; PASHKANG, K.V., st. prepod.; POLTARAUS, B.V.,
dots.; RYCHAGOV, G.I., st. prepod.; SPIRIDONOV, A.I., dots.;
SMIRNOVA, Ye.D., mlad. nauchnyy sotr.; SOLNTSEV, N.A., dots.;
FEDOROVA, I.S., mlad. nauchnyy sotr.; TSESEL'CHUK, Yu.N.,
mlad. nauchnyy sotr.; SHOST'INA, A.A., mlad. nauchnyy sotr.;
Prinimali uchastiye: BELOUSOVA, N.I.; GOLOVINA, N.N.;
KALASHNIKOVA, V.I.; KOZLOVA, L.V.; KARTASHOVA, T.N.;
PAN'KOVA, L.I.; URKIKHC, V.; PETROVA, K.A., red.; LOPATINA,
L.I., red.; YERMAKOV, M.S., tekhn. red.

[Physicogeographical regionalization of the non-Chernozem
center] Fiziko-geograficheskoe raionirovanie nechernozemnogo
tsentra. Pod red. N.A.Gvozdetskogo i V.K.Zhuchkovoii. Moskva,
Izd-vo Mosk. univ., 1963. 450 p. (MIRA 16:5)
(Physical geography)

VASIL'YEVA, I.V.; LAPKINA, N.A.; LYUBUSHKINA, S.G.; PASHKANG, K.V.;
RYCHAGOV, G.I.

Leading role of the lithogenic basis in landform formation.
Vest. Mosk. un. Ser. 5: Geog. 18 no.4:44-47 J1-Ag'63.

(MIRA 17:2)

1. Geografo-biologicheskii fakul'tet Moskovskogo gosudarstvennogo
pedagogicheskogo instituta imeni Lenina.

LYUBUSHKINA, V.M.

Control of spring and summer tick-borne encephalitis in the
Gornyy Altai. Trudy TomNIIVS 11:62-65 '60. (MIRA 16:2)

1. Gorno-altayskaya oblastnaya sanitarno-epidemiologicheskaya
stantsiya.

(ENCEPHALITIS)

(ALTAI MOUNTAINS—TICKS AS CARRIERS OF DISEASE)

LYUBUSHKINA, V.M.

Some characteristics of brucellosis in the Gornyy Altai. Zhur. mikrobiol.
epid. i immun. 29 no.11:116 N '58. (MIRA 12:1)

1. Iz Gornoaltayskoy oblastnoy sanitarno-epidemiologicheskoy stantsii.
(BRUCELLOSIS, epidemiology,
in Russia (Rus))

TEL'PUKHOVSKIY, V.B.; DMITRENKO, T.A.; ZELENIN, I.Ye.; KOSTYAKOVA, G.K.;
RAKHMANIN, B.P.; BORISOV, Yu.S., otv. red.; KRUCHINA, N.Ye., red.;
FEDOROV, A.G., red.; LYUEUSHKINA, Ye., red.; YEGOROVA, I., tekhn.
red.

[In the land of wide-open spaces and heroic deeds; youth in the
virgin lands] V kraiu prostorev i podvigov; molodezh na tseline.
Sbornik dokumentov. Moskva, Izd-vo TsK VLKSM "Molodaia gvardiia,"
1962. 278 p. (MIRA 15:5)

(Agricultural laborers)

45162

S/189/63/000/001/003/014
B104/B102

24.2200

AUTHORS: Chechernikov, V. I., Lyubutin, I. S.

TITLE: The temperature dependence of the magnetic susceptibility and of resonance absorption in Cr_2O_3 , MnO and NiO

PERIODICAL: Moscow. Universitet. Vestnik. Seriya III. Fizika, astronomiya, no. 1, 1963, 20 - 23

TEXT: A study was made of the temperature dependence of the magnetic susceptibility (100 - 1300°K) and of the resonance absorption (3-cm range) in the polycrystalline antiferromagnetic compounds Cr_2O_3 , MnO , and NiO . The samples made available by R. Z. Levitin were of 1 mm diameter and 3 mm high. Measurements were made in an argon atmosphere. The magnetic susceptibility of Cr_2O_3 has a sharp maximum at 314°K; that of NiO a broad maximum at 640 °K. The lower the temperature lies under the antiferromagnetic Curie point ($\theta_{af} = 314$ °K) the stronger is the dependence of the susceptibility of Cr_2O_3 on the magnetic field. For $T > \theta_{af}$ the susceptibility decreases with increasing temperature; this dependence is less

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The temperature dependence of the ...

S/188/63/000/001/003/014
B104/B102

pronounced in the ferromagnetic region. The susceptibility of NiO decreases with increasing field strength. This is explained as due to the existence of ferromagnetic impurities. The susceptibility is independent of the field strength only above 1040 °K. It is assumed that θ_{af} of Cr_2O_3 is independent of the magnetic field strength and that θ_{af} of NiO becomes lower with increasing field strength. Study of the temperature dependence of the susceptibility in the paramagnetic region shows that the Curie-Weiss law is valid. The paramagnetic Curie point, the Curie-Weiss constant and the magnetic moment (Table) are determined. For temperatures below θ_{af} the resonance absorption of Cr_2O_3 falls steeply to a constant value. The decrease of the resonance absorption of MnO begins already in the paramagnetic region. The half-width of the resonance absorption in Cr_2O_3 remains constant in the paramagnetic region; it rises steeply at θ_{af} . MnO shows similar behavior. The following values were obtained for the g-factors: $g = 1.87$ (Cr_2O_3) and $g = 1.90$ (MnO). There are 4 figures and 1 table.

Card 2/3

The temperature dependence of the ...

S/188/63/000/001/003/014
B104/B102

ASSOCIATION: Kafedra magnetizma (Department of Magnetism)

SUBMITTED: May 8, 1962

Table. Paramagnetic Curie point (θ_p , °K); θ_{af} , °K; Curie-Weiss constant; magnetic moment.

Table

	θ_p , °K	θ_{af} , °K	C, град.	P_p , μ_B
Cr ₂ O ₃	- 450	314	3,4	5,2
NiO	-2270	640	2,82	4,75
MnO	- 227	122*	3,06	4,98

Card 3/3

L 58457-65 EWT(i) Peb DIAAP/LIP(c)
ACCESSION NR: AF5013668

UR/0386/65/001/001/0026/0031

26
20
8

AUTHOR: Belov, K. P.; Lyubutin, I. S.

TITLE: Mossbauer effect at Sn-114 nuclei introduced into yttrium iron garnet lattice

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 1, no. 1, 1965, 26-31

TOPIC TAGS: Mossbauer effect, yttrium iron garnet, effective field, tin, quadrupole splitting, chemical shift

ABSTRACT: The effect was measured in yttrium iron garnet $\text{Ca}_{0.3}\text{Y}_{2.7}\text{Sn}_{0.3}\text{Fe}_{4.7}\text{O}_{12}$ in which the Fe^{3+} ions were replaced by Sn^{4+} ions. The resistance of the YIG was on the order of 10^{10} - 10^{12} ohm-cm, so that it could be regarded as a dielectric. The source of gamma radiation was Sn^{119} in powdered Mg_2Sn deposited on a copper substrate; the thickness of the radioactive layer was 6.5 mg/cm^2 . The absorber was prepared by depositing 54 mg/cm^2 powdered YIG prepared from SnO_2 enriched to 87% of Sn^{119} on aluminum foil. The source was at the temperature of liquid nitrogen. The absorber was set in motion relative to the source by means of a cam

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L 58457-65

ACCESSION NR: AP5013668

mechanism. Both at room and at liquid-nitrogen temperature the absorption spectrum consisted of six components. In addition, a small peak is observed in the center of the spectrum, possibly due either to a small amount of non-reacting SnO_2 or to formation of a CaSnO_3 phase with perovskite structure. The values of the effective field H_{eff} , the quadrupole splitting e , and the chemical shift δ for 80 and 295K are:

	T = 80°K	T = 295°K
H_{eff} , kOe	210.5 ± 2	152 ± 3
e , mm/sec	0.17 ± 0.05	0.0 ± 0.1
δ , mm/sec	-1.9 ± 0.1	-1.9 ± 0.1

It follows that the magnetic fields at the tin nuclei in the investigated iron garnet reach large values. They are interpreted as being due to polarization of the electronic core of the tin atom by the exchange fields of the 3d-electrons of the iron atoms. "We are grateful to Academician I. K. Kikoin and to V. I. Nikolayev for furnishing the source and to R. M. Kuz'min for preparing the Mg_2Sn compound. We are also deeply grateful to V. A. Bryukhanov and N. N. Delyagin for

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L 58457-65
ACCESSION NR: AP5013668

technical help and numerous valuable consultations." Orig. art. has: 1 figure.

ASSOCIATION: Institut kristallografii Akademii nauk SSSR (Institute of Crystallography, Academy of Sciences, SSSR)

SUBMITTED: 13 Feb 65 ENCL: 00 SUB CODE: SS, NP

NR REF SOV: 004 mm/sec OTHER: 003
s, mm/sec

282
Card 3/3

I. 9/11-66 EWT(l)/EWT(m)/T/EWF(t)/EWF(b) IJP(c) JD/GG

ACC NR: AP5024692

SOURCE CODE: UR/0056/65/049/003/0747/0750

AUTHOR: Belov, K. P.; Iyubutin, I. S.

ORG: Institute of Crystallography of the Academy of Sciences SSSR (Institut Kristallografii Akademii nauk SSSR)

TITLE: Effective magnetic fields at tin nuclei in substituted iron garnets $\text{Ca}_{x}\text{Y}_{3-x}\text{Sn}_{x}\text{Fe}_{5-x}\text{O}_{12}$

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49, no. 3, 1965, 747-750.

TOPIC TAGS: tin, yttrium compound, garnet, ferrite, Mossbauer effect, crystal lattice structure, electron interaction

ABSTRACT: This is a continuation of earlier work by the authors (ZhETF, Pis'ma v redaktsiyu, v. 1, no. 1, 26, 1965), in which it was discovered that the nuclei of non-magnetic tin located in an iron garnet are acted upon by a strong internal effective magnetic field (211 koe), attributed to polarization of the electron core of the tin atoms by the exchange fields of the iron-atom 3d-electrons. The present study dealt with the Mossbauer effect of Sn^{119} introduced into the lattice of substituted yttrium iron garnets, to check on the relation between the effective field at the tin nuclei and the magnetic moment of the sublattice. The experimental conditions were the same as in the earlier investigation. It was found that the nuclei of tin ions located in the octahedral ferrite sublattice are acted upon by an effective field whose magnitude

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L 9/11-66

ACC NR: AP5024692

3

is related to the tin concentration (x). At low values of x (≤ 0.7) the effective field was due to simultaneous action of a-a and a-d exchange interactions, but at larger values ($x \geq 0.7$) the effective field was due mainly to the a-d interaction. Authors thank Professor L. M. Belyayev for continuous interest in the work. Orig. art. has: 2 figures and 1 table. 44,55

SUB CODE: 20/ SUBM DATE: 06Apr65/ ORIG REF: 003/ OTH REF: 002

Card 2/2 *K*

L 1315-66 EWT(m)/EWP(t)/EWP(b) LIP(c) JD/JG

ACCESSION NR: AP5012549

UR/0181/65/007/005/1397/1401

AUTHOR: Lyubutin, I. S.TITLE: Anomalies of the coercive force and of the residual magnetization in substituted rare-earth iron garnets 20
133

SOURCE: Fizika tverdogo tela, v. 7, no. 5, 1965, 1397-1401

TOPIC TAGS: gadolinium compound, yttrium compound, garnet, ferrite, coercive force, magnetization v1 v1

ABSTRACT: The purpose of the investigation was to trace the variation in the character of the anomalies of coercive force at the compensation point in the gadolinium iron garnets in which the magnetic iron ions were replaced by tetravalent ions of tin, and the gadolinium ions were replaced by divalent ions of calcium, in accordance with the stoichiometric formula $\text{Ca}_x\text{Gd}_{3-x}\text{Sn}_x\text{Fe}_{5-x}\text{O}_{12}$ ($0 \leq x \leq 1.2$), and yttrium iron garnets similarly substituted in accordance with the formula $\text{Ca}_x\text{Y}_{3-x}\text{Sn}_x\text{Fe}_{5-x}\text{O}_{12}$ ($0 \leq x \leq 1.2$). The measurements were made with samples measuring 50 x 4 mm by a ballistic method. All the ferrites exhibit an anomalous growth of the coercive force approaching the compensation temperature. It is also seen that the anomaly of the coercive force decreases rapidly with increasing x. At the same time, the temperature interval in which the anomalous growth of the

Card 1/2

L 1315-66

ACCESSION NR: AP5012549

2
coercive force appears broadens. These ferrites exhibit a maximum of residual magnetization in the low temperature region. Substituted yttrium iron garnets show no low-temperature anomalies of the residual magnetization, but exhibit at temperatures 80--90K small anomalies of the coercive force. The results are attributed to the dilution of the rare-earth sublattice by the calcium ions and of the iron sublattice by the tin ions. "The author is grateful to K. P. Belov for valuable advice and a discussion of the results." Orig. art. has: 6 figures.

ASSOCIATION: Institut kristallografii AN SSSR, Moscow (Institute of Crystallography, AN SSSR)

SUBMITTED: 30Nov64

ENCL: 00

SUB CODE: SS

NR REF SOV: 004

OTHER: 002

mlr
Card 2/2

L 57587-65 EWT(1)/EWT(m)/EWP(w)/EWA(d)/T/EWP(t)/EED-2/EWP(b)/EWA(c) IJP(c)

JD/JG

ACCESSION NR: AP5013717

UR/0070/65/010/003/0351/0356

548.0:538

33
32
B

AUTHOR: Belov, K. P.; Lyubutin, I. S.

TITLE: The magnetic properties of substituted gadolinium and yttrium garnet ferrites

SOURCE: Kristallografiya, v. 10, no. 3, 1965, 351-356

TOPIC TAGS: magnetic property, garnet, ferrite

ABSTRACT: The effect of temperature on spontaneous magnetization was studied in two systems of substituted garnet ferrites: $(Y_{3-x}Ca_xFe_{5-x}Sn_xO_{12}$ and $Gd_{3-x}Ca_xFe_{5-x}Sn_xO_{12}; 0 \leq x \leq 3)$. The two systems were synthesized using conventional techniques. The Fe^{3+} ions were replaced with nonmagnetic Sn^{4+} ions and to preserve neutrality the Y^{3+} and Gd^{3+} ions were replaced with Ca^{2+} ions. The variation in spontaneous magnetization of the C sub-lattices was measured. X-ray analysis showed that all compositions had a garnet structure. Magnetization was measured using ballistic methods in fields up to 2000 oersteds. The value of σ_s was measured by

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L 57587-65
ACCESSION NR: AP5013717

extrapolating the linear part of the isothermal curve to $H=0$. Measurements showed that a field of 2000 oersteds was sufficient to saturate the samples up to $x=1.2$. Curie points were determined from the point where the tangent to the $\sigma_g(T)$ curve at the point of inflexion intersects the x -axis. It was established that all ferrites of the Gd system have compensation points. The difference between the Curie point and the compensation point reaches a maximum value when $x \approx 0.5$. Orig. art. has: 6 figures, 1 table, 2 formulas.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet Im. M. V. Lomonosova (Moscow State University)

SUBMITTED: 17Jul64

ENCL: 00

SUB CODE: EM, SS

NO REF SOV: 003

OTHER: 005

AR
Card 2/2

L 22493-66 EWT(1)/EWT(m)/T/EWP(t) LJP(c) JD/GG

ACC NR: AF6009638

SOURCE CODE: UR/0181/66/008/003/0643/0646

AUTHOR: Lyubutin, I. S.

ORG: Institute of Crystallography, AN SSSR, Moscow (Institut kristallografi AN SSSR)

TITLE: Effective magnetic fields at Sn¹¹⁹ nuclei in iron garnets having compensation points

21 21

64
63
B

SOURCE: Fizika tverdogo tela, v. 8, no. 3, 1966, 643-646

TOPIC TAGS: tin, ferrite, garnet, gadolinium compound, yttrium compound, crystal lattice structure, Mossbauer effect, absorption spectrum, Zeeman effect, magnetic field

ABSTRACT: This is a continuation of earlier investigations (ZhETF v. 49, 747, 1965; ZhETF (pis'ma v redaktsiyu) v. 1, 26, 1965) of the effective magnetic fields acting on nuclei of nonmagnetic tin atoms in substituted yttrium iron garnets. The present study is devoted to the effective magnetic fields at the Sn¹¹⁹ nuclei in substituted gadolinium iron garnets Gd_{3-x}Ca_xFe_{5-x}Sn_xO₁₂, which have compensation points. The main purpose of the investigation was to see whether the gadolinium sublattice exerts an influence on the effective fields at Sn ions situated in the octahedral ferrite sublattice, and in particular whether the effective field vanishes on passing through the compensation point. The gadolinium iron garnets

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2

L 22493-66

ACC NR: AP6009638

tested were those described in an earlier article (Kristallografiya v. 10, 351, 1965), and samples with $x = 0.1, 0.9,$ and 0.3 were chosen for the measurements. The measurements were made with a Mg_2Sn source kept at liquid-nitrogen temperature. The absorbers of the investigated ferrites contained tin enriched with Sn^{119} to 87%. The absorption spectrum was found to split into six well resolved components, corresponding to the Zeeman interaction between the magnetic moment of the Sn^{119} nucleus and the magnetic field. The values of the effective fields acting on the nonmagnetic tin nuclei were found to be $163 \pm 3, 155 \pm 3,$ and 30 ± 5 koe for the samples with $x = 0.1, 0.3,$ and $0.9,$ respectively. These results are the same as obtained earlier for the yttrium iron garnets, so that the existence of a compensation point has no influence on the value of the effective field. The author thanks K. P. Belov for guidance and a useful discussion of the results and L. M. Belyayev for interest in the work. Orig. art. has: 3 figures.

SUB CODE: 20/ SUBM DATE: 31Mar65/ ORIG REF: 003/ OTH REF: 001

Card 2/2 BK

BYSTROV, Boris Petrovich, aspirant; LYUBUTIN, Oleg Savel'yevich, inzh.

Measurement of some parameters of sheet materials with variable thickness. Izv.vys.ucheb.zav.; elektromekh. 8 no.8:931-936 '65.

(MIRA 18:10)

1. Kafedra izmeritel'noy tekhniki Novocherkasskogo politekhnicheskogo instituta (for Bystrov).

L 16091-65 EWT(l)/EPA(s)-2/EWT(m)/EWP(t)/EWP(b) Pt-10 IJP(c)/ESD(t)/
ACCESSION NR: AP5000318 ESD(gs)/AFWL S/0056/64/047/005/1711/1716
JD/GG

AUTHORS: Brandt, N. B.; Lyubutina, L. G.

TITLE: Investigation of the frequency modulation of quantum oscillations of the magnetic susceptibility of bismuth

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 47, no. 5, 1964, 1711-1716

TOPIC TAGS: bismuth, magnetic susceptibility, quantum oscillation, single crystal

ABSTRACT: The periodic variation of the oscillation frequency of the magnetic susceptibility of bismuth at very low temperatures as a function of the reciprocal magnetic field, observed earlier by one of the authors (Brandt with T. F. Dolgolenko and N. N. Stupochenko, ZhETF v. 45, 1319, 1963), was further investigated at three principal orientations of bismuth single crystals relative to the

Card 1/3

L 16091-65

ACCESSION NR: AP5000318

suspension axis of the torsion balance used. The temperature was 0.2°K, and the samples and procedure were the same as used in the previous study. The purpose was to investigate this effect in greater detail simultaneously on the hole and electron equal-energy surfaces, thus clarifying the nature of the effect. The tests have shown that variation in the frequency of the hole oscillations is opposite in phase to the variation of the frequency of the electron oscillations. For the electronic high frequency oscillations the effect is much weaker than for the hole oscillations. The periods of the frequency modulation correspond to the periods of the fundamental low-frequency oscillations observed at a given orientation of the magnetic field. Extrapolation into the region of larger fields results in an increase in the frequency of the electronic oscillations and a decrease in the frequency of the hole oscillations in the last period of the low-frequency oscillations. The model proposed by C. G. Grenier et al. (Phys. Rev. v. 132, 1, 1963) for the electron transitions between closed equal-energy sur-

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ACCESSION NR: AP5000318

2

faces, occurring with variation of the magnetic field, is found to agree with the observed singularities in the frequency modulation. "In conclusion we thank A. I. Shal'nikov for interest in the work." Orig. art. has 4 figures.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: 04Jun64

ENCL: 00

SUB CODE: SS, EM

NR REF SOV: 002

OTHER: 002

Card 3/3

CONFIDENTIAL

SECRET

VESHEV, A.V.; LYUBTSEVA, Ye.F.; YAKOVLEV, A.V.

Determining the effective resistance of the medium from measurements of low-frequency electric fields. Uch. zap. LGU no. 324:250-294 '64.

(MIRA 1984)

LYUBUTSKAYA, L.V. (Moskva)

Stability of a plane parallel flow of a viscous liquid
under basic constant tangential strain and inclined strong
weight. Zhur. vych. mat. i mat. fiz. 1 no.6:1139-1143
N-D '61. (MIRA 16:7)

WILSON, W. T., author

"Use of the Method of Solid Solution in the Theory of Inelasticity," *Journal of Applied Mechanics*, vol.

vol. 1-2, 1945

PT20051010

LYUBVIN, V. I.

Obrabotka detalei redutsirovaniem; analiz protsessa, raschet i
konstruirovaniie oborudovaniia. Moskva, Mashgiz, 1949. 146 p. plates, diagrs.

Bibliography: p. (144)

(Machining parts by reduction; analysis of the process, calculations and
designing of equipment.)

DLC: TS253.L5

SO: Manufacturing and Mechanical Engineering in the Soviet Union,
Library of Congress, 1953.

AUTHOR: LYUBVIN, V.I. PA - 3614
TITLE: A Rotation-Upsetting- and Pressing Machine PK-1 for the Working of
Profiled Pressed Parts. (Rotatsionnyy obzhimnoy stanok PK-1 dla
obrabotki profil'nykh detaley, Russian)
PERIODICAL: Stanki i Instrument, 1957, Vol 28, Nr 6, pp 16-17 (U.S.S.R.)
ABSTRACT: The method of rotation profile pressing when working workpieces
with variable round profiles warrants a considerable saving of mate-
rial, high efficiency, and greater durability.
This method was worked out by the Scientific Research Institute for
the Construction Machines for the Textile Industry. Among several
others, also the author participated in constructing the P.K.I.
machine. It operates in an automatic cycle and serves for the cold
treatment of spinning spindles, tapered rollers, tapered pins, etc.
As semifinished product round iron of ϕ 5 - 20 m/m and a length of
up to 2,5 m is used. The machine consists of the following main
parts: (illustration 2) the working head (A), the profiling
mechanism (Б), the shifting mechanism for the drum (B), the
sledge (Г), the feeding device (Д), the lunette (E), the electric
oil pump (Ж), and the control mechanism. These parts and their

Card 1/2

PA - 3614
A Rotation-Upsetting- and Pressing Machine P.K.I. for the Working of
Profiled Pressed Parts.

operation are described in detail. By improved construction and by
using better material this method intends to eliminate all faults
occurring with other machines, such as low degree of durability,
frequent fractures, etc. The saving of material is said to be 40%.

ASSOCIATION: Not given
PRESENTED BY:
SUBMITTED:
AVAILABLE: Library of Congress

Card 2/2

25(1)

PHASE I BOOK EXPLOITATION

SOV/2066

Lyubvin, Vladimir Ivanovich

Obrabotka detaley rotatsionnym obzhatiyem (Rotary-swaging of Machine Parts)
Moscow, Mashgiz, 1959. 194 p. Errata slip inserted. 4,500 copies printed.

Reviewer: A.I. Zimin, Doctor of Technical Sciences, Professor; Ed. of Publishing
House: G.M. Grushevskaya; Tech. Ed.: B.I. Model'; Managing Ed. for Literature
on Heavy Machine Building (Mashgiz): S.Ya. Golovin, Engineer.

PURPOSE: This book is intended for engineers and technicians, designers, and
technologists concerned with press-forming of metals.

COVERAGE: This book covers the theoretical fundamentals of rotary-swaging, the
deformation of metal with various types of reducing mechanisms, the scheme of
designing rotary-swaging machinery and the determination of optimum regimes for
their operation. The author gives special attention to the design of cams and
tools(dies and hammers), to the description of construction of rotary-swaging machines,
their working principles, set-ups and adjustments. No personalities are
mentioned. There are 12 references: 11 Soviet and 1 Czech.

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Rotary-swaging of Machine Parts

SOV/2066

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AVAILABLE: Library of Congress

Card 5/5

GO/gmp
8-12-59

LYUBVIN, V.I., kand.tekhn.nauk; KOSENKO, I.N., kand.tekhn.nauk

Automatic rotary swaging machine for valve stems of engines. Trakt. i
sel'khoz mash. 33 no.1:37-39 Ja '63. (MIRA 1:3)
(Valves) (Engines)

LYUBYANITSKIY, Grigoriy Davidovich; FREGER, D.P., red.izd-va,
GVIRTS, V.L., tekhn. red.

[Ultrasonic cleaning of parts] Tekhnologiya ul'trazvukovoi
ochistki detalei. Leningrad, 1963. 16 p. (Leningradskii
dom nauchno-tekhnikheskoi propagandy. Obmen peredovym opytom
Seria: Elektricheskie metody obrabotki materialov, no.6)
(MIRA 16:10)

(Ultrasonic waves--Industrial applications)

L 24823-66 EWT(d)/EWT(m)/EWP(v)/EWP(t)/EWP(k)/EWP(h)/EWP(l) LJP(c) JD/HW
ACC NR: AP6006951 (N) SOURCE CODE: UR/0381/65/000/006/0003/0008

AUTHORS: Zatsapin, N. N.; Shcherbinin, V. Ye.; Yezhov, N. M.; Kokhman, L. V.;
Novikov, M. K.; Lyubynskiy, Ye. A. 54
53
B

ORG: Institute of Physics of Metals, AN SSSR (Institut fiziki metallov AN SSSR);
Pervoural New Pipe Factory (Pervoural'skiy Novotrubnyy zavod)

TITLE: Ferroprobe defectoscope for steel tubes in applied circular magnetic fields

SOURCE: Defektoskopiya, no. 6, 1965, 3-8

TOPIC TAGS: steel, ferromagnetic material, magnetic field, defectoscope, measuring instrument

ABSTRACT: A method is described for locating defects in ferromagnetic tubes made of hot-rolled and cold-drawn steels. The technique consists of measuring both surface and internal defects simultaneously by an externally placed ferromagnetic probe counter. The method is applied under both static and dynamic conditions with equal success. In the dynamic case, the probe is rotated around the tube at the rate of 1000 rev/min. Curves are obtained depicting the probe omf versus the depth of surface defects and the depth of defects on the internal surface of the tube. A large amount of scatter observed in the data is caused primarily by the varied configurations of the defects. For a 4-mm wall thickness, surface defects

Card 1/2

UDC: 620.179.14

L 24823-40

ACC NR: AP6006951

appear to start at depths of 0.1--0.2 mm, in the internal surface defects, at 0.2--0.3 mm. The authors express their gratitude to R. I. Yanus for his valuable advice in evaluating this work. Orig. art. has: 6 figures.

SUB CODE: 14/ SUBM DATE: 16Oct65/ ORIG REF: 003

Card 2/2200-

ACC NR: AP7002717

(A)

SOURCE CODE: UR/0381/66/000/006/0035/0042

AUTHOR: Oshchepkov, P. K.; Kloyev, V. V.; Degterev, A. P.; Semenov, O. S.; Lyubynskiy, Ye. A.

ORG: Scientific Research Institute of Introscopy (NII introskopii)

TITLE: VTDN-1 installation for monitoring surface defects in ferromagnetic pipes

SOURCE: Defektoskopiya, no. 6, 1966, 35-42

TOPIC TAGS: pipe, ferromagnetic material, eddy current, nondestructive test/ VTDN-1 flaw detector

ABSTRACT: The authors describe an eddy-current flaw detector with contact-type pickups (type VTDN-1), intended to disclose external cracks, beads, films, deep scratches, hairlines and other defects on the outer surface of hot-rolled ferromagnetic pipes. The secondary-field indicator is a resonant pickup which is placed in contact with the pipe and which consists of a pair of coils. During the test, the pickup rotates around the linearly-moving pipe, thereby scanning the investigated surface along a helical line. The signals from the pickup are detected with a resonant amplifier. The operating principle is based on eddy currents induced in the pipe and an automatic comparison of two adjacent sections of the surface by two pipes. The apparatus consists of mechanical equipment for rotating the pickups, an oscillator block, pickup blocks, an interconnection block, amplifier blocks, an induction block, a blocking and synchronization block, a tuning indicator, and a power supply.

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UDC: 620.179.14

ACC NR: AP7002717

The instrument was tested at the Pervoural'skiy Novotrubnyy plant and was found suitable for nondestructive quality control of the outer surface of hot-rolled tubes. It is indicated that by slight modification it can be used for continuous monitoring of pipes as they are produced. Orig. art. has: 3 figures.

SUB CODE: 14/ SUBM DATE: 07Feb66

Card 2/2

27 1720

2*241

S/581/61/000/000/012/020
D299/U304

AUTHOR: Lyuchanskiy, E.R.

TITLE: The behavior of cerium-144 in rats after inhaling it

SOURCE: Lebedinskiy, A.V. and Koskalev, Yu.I., eds. Biologicheskoye deystviye radiatsii i voprosy raspredeleniya radioaktivnykh izotopov; sbornik rabot. Moscow, Gosatomizdat, 1961, 111-118

TEXT: Due to the shortage of works on the behavior of cerium-144 in the body when inhaled, the author made a study of the behavior of cerium-144 hydrochlorate in rats after entering the body via the respiratory tract. The method used was dynamic inhalation, which maintained a steady dispersion of the aerosols in the inhalation chamber. The chamber used was one designed by V.S. Perov. A detailed description of this chamber is given. The aerosol concentration ranged from 0.217 to 0.258 $\mu\text{c}/\text{l}$, and inhalation lasted 20 minutes. It was found that 48.7% of the inhaled cerium was retained

Card 1/3

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S/581/61/000/000/012/020
D299/D304

The behavior of cerium-144...

in the rats. Primary deposition of cerium in the lungs was 19.4% of the inhaled, or 41.6% of the retained, amount. Within 16 days about 50% was resorbed from the lungs, while 30.35% of the original content was excreted by the ciliated cells. By the 65th day only 0.91% of the inhaled, or 4.7% of the original, activity was noted in the lungs. During the experiment the cerium concentration was higher in the lungs than in the liver and the skeleton. The rate of resorption from the lungs was higher in the first 30 minutes from the start of inhalation. The main quantities of the resorbed fraction of cerium-144 are deposited in the skeleton and the liver. Its distribution approaches that which occurs with subcutaneous introduction of cerium-144. The isotope is excreted relatively rapidly from the soft tissues. For 65 days a steady accumulation of cerium-144 was noted in the skeleton. Over a period of 16 days 0.4% of the inhaled quantity was excreted with the urine and 65% with the stools. There are 1 figure, 3 tables and 15 references: 12 Soviet-bloc and 3 non-Soviet-bloc. The references to the English-language publications read as follows: D. Hamilton, Radiology, 49

Card 2/3

10242

S/581/61/000/000/012-020
D299/L304

The behavior of cerium-144...

3 (1947); K.G. Scott, D.G. Axelrod, G. Crowley, D. Hamilton,
Ann. Archiv. of Pathol., 48, 1-31, (1949)

Card 3/3

LYUCHENKO, S. D.

"The Effectiveness of the Use of Chenopodium Oil in Cases of Ascariasis and Ancylostomiasis", Med. Paraz. i Paraz. Bolez., Vol. 17, No. 5, pp 427-32, 1948.

LYUCHEVSKIY, V.P.

Technical production standard is improving. TSevent 30 no.3:20
My-Je '64. (MIRA 17:11)

5970

S/032/60/026/04/16/046
B010/B006

2815
24.1805

AUTHORS: Lyuchkov, A.D., Lamin, A.B., Polyakova, B.Z., Chernyavskiy, A.A.

TITLE: Detection of Defects in Welding Seams of Small-diameter Tubes

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol. 26, No 4, pp. 454-457

TEXT: The sensitivity of ultrasonic control methods for welding seams of small-diameter tubes (51 mm x 2.5 mm) was investigated. A UZD-7N ultrasonic crack detector (Fig. 1, photograph) was used. The pulse-echo method and an acoustic frequency of 2.5 Mcps were applied in the tests. The sound waves were sent in such a way (Fig. 2, diagram) into the tube, as to make them strike the welding seam at an angle of 90°. The maximum heights of the echo pulses thus come to lie in the middle of the scope. Tube specimens having visible defects in the welding seams as well as specimens which had already been subjected to hydraulic tests were investigated. To evaluate the defects by means of the oscillograms obtained, the tubes were cut in pieces after ultrasonic control, and then investigated microscopically. It was found that ultrasonic control is insensitive to defects on the specimen surface, but

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Detection of Defects in Welding Seams of
Small-diameter Tubes

S/032/60/026/04/16/046
B010/B006

that it is very sensitive to deep-going surface defects. The quality of the welding seam can be estimated from the size of the echo reflected from the seam and from the size of the final echo. The type and the size of the defect however, can only be estimated in a first approximation by evaluating both echos. Therefore, a special apparatus must be designed in order to render possible the selection of electric pulses (at the amplifier) with respect to time. There are 4 figures and 1 Soviet reference

ASSOCIATION: Dnepropetrovskiy truboprokatnyy zavod (Dnepropetrovsk Tube-rolling Mill)

Card 2/2

L 7085-66 EWT(1) IJP(c)

ACC NR: AP5027837

SOURCE CODE: UR/0020/65/165/001/0065/0068

AUTHOR: ^{44,55} Sakharov, A. D. (Academician); ^{44,55} Lyudskov, R. Z.; ^{44,55} Smirnov, Ye. N.; ^{44,55} Plyushchev, Yu. I.; ^{44,55} Pavlovskiy, A. I.; ^{44,55} Chernyshev, V. K.; ^{44,55} Feoktistova, Ye. A.; ^{44,55} Zharinov, Ye. I.; ^{44,55} Zysin, Yu. A.

ORG: none

TITLE: Production of very high magnetic fields by explosives

SOURCE: AN SSSR. Doklady, v. 165, no. 1, 1965, 65-68

TOPIC TAGS: pulsed magnetic field, flux compression, high field pulse, implusive flux compression, explosive flux compression, betatron particle acceleration, high density plasma, plasma accelerator/ MK 1, MK 2

ABSTRACT: Experiments with the ¹⁶ MK-1 and ¹⁶ MK-2 explosion devices ¹⁰ for the production of very high magnetic field pulses are described. The MK-1 device, which is based on the implosion of an axial flux within a metal shell, essentially resembles the arrangement described by Fowler and others (J. Appl. Phys. 31, 1965, 588). The MK-2, which works on the principle of the expulsion of the field from the solenoid and the subsequent compression of the field by the walls of the coaxial liner, is described here for the first time. Field intensities of 1×10^6 oe were obtained in experiments with an MK-1 using aluminum liners about 100 mm in diameter. In a subsequent experiment with a stainless steel liner with a copper plated inner surface, a field intensity of

Card 1/3.

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L 7085-66

ACC NR: AP5027837

25 x 10⁶ oe was achieved by imploding the liner to a 4-mm diameter. A field intensity of 5 x 10⁶ oe in a volume of 100 cm³ was produced by a copper liner 300 mm in diameter using the MK-2 as the source of the initial field. The MK-2 has a central conductive cylinder enclosed in a coaxial helical solenoid. On one end of the solenoid is a solid cup. A hole in the bottom of the cup holds the end of the central cylinder (see Fig. 1). The central cylinder is filled with an explosive which is ignited from the

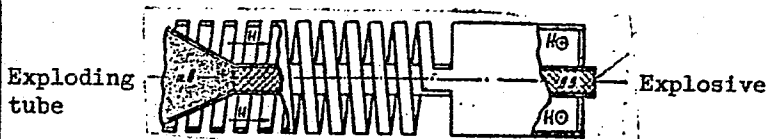


Fig. 1. The MK-2 device

end opposite that holding the cup. The solenoid cylinder system forms the circuit through which a battery of capacitances is discharged. At the peak value of the discharge current, the expanding conical flare of the cylinder created by the propagating explosion touches the end of the solenoid. The explosion's further development is equivalent to moving a cone into the solenoid and shorting its turns until the cone reaches the cup. At this moment a coaxial is formed whose length and inductance grow smaller as the detonation propagates further along the cylinder. The process is accompanied by a corresponding increase in current and field intensity resulting from compression of the flux. Currents of 5 x 10⁷ amp (occasionally up to 1 x 10⁸ amp) at an inductance value of 0.01 μH were obtained, and field intensities of 1 to

Card 2/3

L 7085-66

ACC NR: AP5027837

1.5 x 10⁶ oe were recorded within a volume of several liters. An energy of 1 to 2 x 10⁷ J was stored in the field, which amounts to about 10 to 20% of the energy released during the propagation of the explosion within the length of the cup. A receiver of electromagnetic energy was connected to the MK-2 directly or via a transformer, depending on whether the receiver was of low or high inductance. About 50% of the explosive energy was transferred to the receiver by the latter method, which also permits a spatial separation of the sender and makes possible multi-stage arrangements. In the first stage, the initial field is created by a permanent magnet. The second and the subsequent stages amplify the field received from the preceding stage. Energy transfer was also accomplished by breaking the current-carrying circuit by means of an additional explosive charge and using the breaking surge for the transfer. More than 50% of MK-2 output was transferred by this method. A special MK device has been created for iron-free air core betatrons as described by Pavlovskiy and others (DAN, 160, no. 1, 1965, 68), and experiments have been carried out with electrodynamic accelerators of the coaxial type. Orig. art. has: 3 figures. [FP]

SUB CODE: EM, NP/ SUBM DATE: 23Aug65/ ORIG REF: 002/ OTH REF: 001/ ATD PRESS: 4143

nw

Card 3/3

AKSENOV, Ye. A., glav. red.; KAZAK, A. A., red.; KISHINEV, D. I., red.; LYULCHIK, K. I., red.; MACHUKHIN, Ye. A., red.

Production of peat briquets and semibriquets; exchange of technical-production experience. Proizvodstvo torfobriketov i polubriketov; obmen proizvodstvenno-tekhnicheskim opytom. Minsk, Izd. red.-izd. otdela in-ta nauchno-tekhn. informatsii i propagandy Gosstatista Soveta Ministrov BSSR po koordinatsii nauchno-issl. rabot, 1962. 79 p. (P. 17:11)

1. Vsesoyuznoye nauchno-tekhnicheskoye obshchestvo energeticheskoy promyshlennosti. Belorusskoye respublikanskoye otdeleniye.

BURAKOVKIY, V.I., YEVTEYEV, Yu.V., LYUDE, M.N.

Congenital stenosis of the aortic orifice; preliminary report.
Grud,khir. 5 no.1:56-58 Ja-F'63. (MIRA 16:7)

1. Iz otdeleniya vrozdennykh porokov serdtsa (zav.-kand.med. nauk. V.I.Burakovskiy) Instituta serdechno-sosudistoy khirurgii (dir. -prof. S.A.Kolesnikov, nauchnyy rukovoditel'- akademik A.N.Bakulev) ANI SSSR.

(AORTA---ABNORMALITIES AND DEFORMITIES)
(AORTA---SURGERY)

KOLESNIKOV, S. A.; BURAKOVSKIY, V. I.; MURAV'YEV, M. V.; ROMASHOV, F. N.;
LYUDE, M. N.

Clinical aspects, diagnosis and surgical treatment of cor trilocu-
lare biventriculare. Grud. khir. no.2:16-20 '62. (MIRA 15:4)

1. Iz Instituta serdechno-sosudistoy khirurgii (dir. - prof.
S. A. Kolesnikov, nauchnyy rukovoditel' - akad. A. N. Bakulev)
AMN SSSR.

(HEART—ABNORMITIES AND DEFORMITIES)

LYUDEDZHAN, A.G.

Prevention and early treatment of secondary complications of
paralytic poliomyelitis. Khirurgiia 39 no.4:132-137 Ap'63
(MIRA 17:2)

1. Iz kafedry detskoy khirurgii (zav. - prof. M.D.Kovalevich)
Rostovskogo-na-Donu meditsinskogo instituta.

LYUDERS, G. [Lüders, G.]

Experiments with neutrino. Usp. fiz. nauk 68 no.1:173-178
My '59. (MIRA 12:5)

(Particles, Elementary)

SOCHEVANOV, V.G.; VOLKOVA, G.A.; LYUDIMOVA, L.N.; MARTYNOVA, L.T.;
SHMAKOVA, N.V.; PANOVA, A.I., red.izd-va; PEN'KOVA, S.A.,
tekhn.red.

[Methods of polarographic analysis of raw minerals; results of
a seminar conducted in 1956, in Sverdlovsk] Metody poliarografi-
cheskogo analiza mineral'nogo syr'ia; itogi seminar, provedennogo
v 1956 g. v Sverdlovske. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry
po geol. i okhrane nedr, 1960. 161 p. (MIRA 13:12)

1. Russia (1923- U.S.S.R.) Ministerstvo geologii i okhrany nedr.
2. Vsesoyuznyy institut mineral'nogo syr'ya (for Sochevanov,
Volkova, Martynova, Shmakova).
(Mines and mineral resources) (Polarography)

KOTEL'NIKOV, S.B.; LYUKIMSON, M.I.; AMITINA, N.I.

Pilot plant for the decontamination of waste waters from the arsenic-soda sulfur purification. Koks i khim. no.8:42-45 '62.
(MIRA 17:2)

1. Zhdanovskiy koksokhimicheskiy zavod.

SAKHAROV, I.Ye., kandidat fiziko-matematicheskikh nauk; NYUNIN, S.L., inzhener.

Experimental investigation of vibrations in a large turbogenerator.
Vest.electroprom. 27.11.6-12 J1 '66. (MIRA 10:8)

1.Nauchno-issledovatel'skiy institut Ministerstva elektrotexni-
cheskoy promyshlennosti.

(Turbogenerators--Vibrations)

420

AUTHOR: Lyudin G.L.
 Sakharov, I.E., Candidate Phys.Math.Sci., and Lyudin, G.L.,
 Engineer (Scientific Research Institute of the Ministry of the
 electro-technical industry.)

TITLE: Determination of the dynamic stiffness of the rotor supports
 of a turbo-generator. (Opredeleniye dinamicheskoy zhestkosti
 opor rotora turbogeneratorsa.)

PERIODICAL: "Vestnik Elektromyslenosti" (Journal of the electrical
 industry), 1957, Vol. 28, No. 5, pp. 31 - 34, (U.S.S.R.)

ABSTRACT: The stiffness of rotor supports influences the critical
 speed of an alternator, and if the support is considered as
 an oscillating system it is necessary to know its dynamic
 characteristics. These cannot be calculated and accordingly
 experimental determination of the dynamic stiffness of the
 supports is required. This article gives the results of such
 a determination.

The oscillations of the bearings were set up by means of an
 eccentric vibrator with an amplitude force value of 5 000 kg at
 a speed of 5 000 r.p.m. The vibrator was driven by a 9 kW d.c.
 motor. The vibrator was rigidly fixed to a special steel liner
 which replaced the usual bearing liners at the exciter and the
 turbine ends. Oscillations of the support in three directions
 were measured by a vibrograph type UV-2.

To determine the dynamic stiffness of the support of a
 rotor from the exciter end in the vertical direction
 it was arranged so that the force acted vertically.

Determination of the dynamic stiffness of the rotor supports⁴²⁰
of a turbo-generator. (Cont.)

Records were made of three components of the oscillation of the bearing over the speed range from 0 to 3400 r.p.m. Then the vibrator was installed so that the force acted horizontally and the recordings were repeated. Similar tests were carried out from the turbine end. The speed of the vibrator was increased by stages.

The test results are presented in the form of graphs. The dynamic stiffness of the supports is obtained by dividing the magnitude of the exciting forces by the corresponding amplitudes of vertical or transverse oscillation. On the basis of the experimental results formulae are given for the rigidity of the turbo-generator supports as functions of the speed. The dynamical stiffnesses obtained were used to calculate the critical speed, and the calculated values are compared with experimental ones. The procedure of calculations for determination of the dynamic stiffness of a support from the exciter end is given as an appendix and a particular example is worked out. The results are in good agreement with the experimental data.
3 figures, no literature references.

25(2); 24(6)

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Akademiya nauk SSSR. Institut mashinovedeniya

Kolebaniya v turbomashinakh; sbornik statey (Vibrations in Turbomachines; Collection of Articles) Moscow, Izd-vo AN SSSR, 1959. 117 p. Errata slip inserted. 2,300 copies printed.

Resp. Ed.: S. V. Serensen, Academician, Academy of Sciences, USSR; Ed. of Publishing House: Ya. A. Klimovitskiy; Tech. Ed.: V. V. Volkova.

PURPOSE: This collection of articles is intended for scientific research workers, engineers, and designers in the field of turbomachinery.

COVERAGE: This collection of articles deals with vibrations in turbomachinery. The following topics are discussed: vibrations and stresses in the rotor and bearings of a turbogenerator, vibrations and stability of beams, flexural vibrations of a rotating shaft, whirling speeds of a flexible rotor with two unbalanced masses, acceleration through resonance of a nonlinear system, whirling speed and clearance in bearings, dynamic stresses in blades of an axial compressor, and damping of vibrations. No personalities are mentioned. References follow several of the articles.

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The authors discuss an experimental investigation made on a high-power turbogenerator in order to analyze the real state of stress of the rotor and vibrations of the rotor and bearings. The dynamic behavior of the whole system of joined rotors and bearings is treated. The influences of bases and foundations are not taken into consideration.

Bolotin, V.V. Vibration and Stability of Beams Under Action of Nonconservative Forces

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Rubanik, V.P. Acceleration Through Resonance in One Case of a Nonlinear System

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Rusanova, Ye.I. Investigation of Dynamic Stresses in Blades of an Axial Compressor With a Wide Control Range

104

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Sergeyev, S.I. Damping of Vibrations of Anisotropoelastic Rotors

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Experimental study of elastic centering rings of the banding
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inzh., ved. red.; LYUSTIBERG, V.F., inzh., ved. red.;
SOROKINA, T.M., tekhn. red.

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LYUDINSKIY, N.A., doktor biol. nauk, otv.red.;
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Use of the nonlinear parameters method in determining the electrostatic field for a system of electrodes of small thickness. Visnyk. L'viv. un. Ser. mekh.-mat. no.1:50-53 '65. (MIRA 18:12)

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