

ALEKSANDROVICH, Yezhi [Aleksandrowicz, Jerzy]

[Operation and use of a VVR-S type reactor in Poland in 1961-1962] Doklad ob ispol'zovanii i ekspluatatsii reaktora tipa VVR-S v Pol'she za 1961-1962 goda. Swierk. Instytut Badan Jadrowych, 1963, 16 p. (Kontserentsiia po fizike i tekhnike reaktorov, Praga, April' 1963: Doklad no.420/XI) (MIRA 17:4)

ALEKSANDROVICH, Ye. I.

Changes in bones during the postnatal period in the offspring of rabbits subjected to ionizing radiations in various periods of pregnancy. Med.rad. 4 no.10:30-34 0 '59. (MIRA 13:2)

1. Iz rentgenovskogo otdeleniya (zav. - doktor med.nauk A.I. Kochergin)
Instituta akusherstva i ginekologii AMN SSSR.
(BONE AND BONES radiation effects)
(RADIATION EFFECTS experimental)
(FETUS radiation effects)

31019. ALEKSANDROVICH, YE. V. AND GUNDAREV, K. M.

Dva sluchaya lecheniya samoproizvol'noy gangreny tkanevoy terapiy
po metody akademika V. P. filatova. Khirurgiya, 1949, No. 9, s 69-71

ALEKSANDROVICH, YE. V.

Diseases--Causes and Theories of Causation

Etiology of Epiphora. Vest. oft., 30, No. 6, 1951

Monthly List of Russian Accessions, Library of Congress, March 1952. UNCLASSIFIED.

ALEKSANDROVICH, Ye.V.

Method of conservative treatment in senile cataract. Uch.
zap. GNII glaz.bol. no.8:107-108'63. (MIRA 16:9)

1. Vologodskaya oblastnaya glaznaya bol'nitsa - nauchnyy opor-
nyy punkt Gosudarstvennogo nauchno-issledovatel'skogo insti-
tuta glaznykh bolezney imeni Gel'mgol'tsa.

(CATARACT) (ELECTROPHORESIS)
(NOVOCAINE)

ALEKSANDROVICH, Yu. (Krakov); BLIKHARSKIY, Yu. (Krakov);
FEL'YINOVSKIY, A. (Krakov).

Morphology of granulocytes in electron microscope pictures.
arkh.pat. no.15:75-77 N-D '53. (MIRA 7:1)

1. Iz 3-y kliniki vnutrennikh bolezney meditsinskoy akademii v
Krakove (direktor - professor Yu.Aleksandrovich) i Gosudarstven-
nogo instituta gigiyeny (direktor - professor M.Pshesmytskiy).
(Leucocytes) (Electron microscope)

ALEKSANDROVICH, Yu.

Minima of eclipsing variable stars. Astron. tsir. no.194:25-26
Ag '58. (MIRA 12:12)

1. Kollektiv nablyudateley Odesskogo Vsesoyuznogo astronomo-geode-
zicheskogo obshchestva (OdVAGO).
(Stars, Variable)

ALEKSANDROVICH, Yu.

Plan for the classification and nomenclature of blood cells and
diseases of the blood system. Probl. gemat. i perel. krovi 5
no. 8:8-13 Ag '60. (MIRA 14:1)
(BLOOD CELLS) (BLOOD--DISEASES)

ALEKSANDROVICH, Yu. B.; ROTIN, A.L.

Immediate tasks in the field of heating boiler construction.
Vod. i san. tekhn. no.5:1-7 Ag '55. (MLRA 9:2)
(Boilers)

ALEKSANDROVICH, Yu.B., inzh., red.; PETROVA, V.V., red.izd-va;
BOROVHEV, N.K., tekhn.red.

[Regulations for constructing steam heating plants in populated areas] Pravila ustroistva otopitel'nykh kotel'nykh v naselennykh mestakh SN 12-57. Moskva, Gos.izd-vo lit-ry po stroitel'stvu i arkhit., 1957. 13 p. (MIRA 12:12)

1. Russia (1923- U.S.S.R.) Komitet po delam stroitel'stva.
(Steam heating)

ALEKSANDROVICH, Yu.B.

Standard designs of boiler installations. Vod.1 san.tekh. no.5:1-9
My '57. (MIRA 10:7)

(Boilers)

ALEKSANDROVICH, Yu.B.

Replacing basic elements of DKV boilers. Vod. i san. tekhn.
no. 7:39 J1 '58. (MIRA 11:7)

(Boilers)

ALEKSANDROVICH, Yu.B.

Centralized heat supply from boiler installations. Vod.i san.
tekhn.no.6:9-14 Je '60. (MIRA 13:6)
(Heating)

BRODSKIY, Yelizar Fedorovich, kand. tekhn. nauk; ALEKSANDROVICH, Yu. B.,
retsenzent; BELINKIY, Ye. A., nauchnyy red.; GRIGOR' YEVA,
I. B., red. izd-va; PUL'KINA, Ye. A., tekhn. red.

[Hot-water supply in connection with heating from central
stations] Goriachee vodosnabzhenie pri teplofikatsii.
Leningrad, Gos. izd-vo lit-ry po stroit., arkhit. i stroit.
materialam, 1961. 133 p. (MIRA 14:12)

(Hot-water supply)

(Heating from central stations)

DZHAMALOV, O.B., doktor ekon. nauk, GUSEV, Yuriy L'vovich, dots.,
kand. tekhn. nauk; KOP'YEV, Sergey Fedotovich, prof., doktor
tekhn. nauk; ALEKSANDROVICH, Yu. B., retsenzent; FEDOROV, M.N.,
starshiy inzh., retsenzent; OSENKO, L.M., red. izd-va; RODIONOVA,
V.M., tekhn. red.

[Boiler systems and thermal networks]Kotel'nye ustanovki i tep-
lovye seti. Moskva, Gosstroizdat, 1962. 310 p. (MIRA 16:1)

1. Gosudarstvennyy komitet Soveta Ministrov SSSR po delam
stroitel'stva (for Aleksandrovich). 2. Nauchno-issledovatel'-
skiy institut sanitarnoy tekhniki Akademii stroitel'stva i ar-
khitektury SSSR (for Fedorov).

(Boilers) (Heating from central stations)

ALEKSANDROVICH, Yu.B., inzh., red.

[Temporary instructions for designing underground gas lines of asbestos-cement pipes laid outside of inhabited places and industrial areas] Vremennye ukazania po proektirovaniu podzemnykh gazoprovodov iz asbestotsementnykh trub dlia prokladki vne territorii naselennykh mest i promyshlennykh ploshchadok SN 182-61. Utverzhdeny Gosudarstvennym komitetom Soveta Ministrov SSSR po delam stroitel'stva 17 avgusta 1961 g. Moskva, Gos. izd-vo lit-ry po stroit., arkhitekt. i stroit. materialam, 1961. 14 p. (MIRA 15:3)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam stroitel'stva.

(Pipe, Asbestos--Cement) (Gas--Pipelines)

9/035/60/000/006/008/038
A001/A001

Translation from: Referativnyy zhurnal, Astronomiya i Geodeziya, 1960, No. 6,
pp. 18-19, # 5007

AUTHOR: Aleksandrovich, Yu. R.

TITLE: Eclipse of the Moon of 1959, March 24-25

PERIODICAL: Astron. tsirkulyar, 1959, okt. 15, No. 205, pp. 6-7

TEXT: The eclipse was observed by the members of the Odessa branch of VAGO with the aid of a 80-mm refractor (80x) and a Steingel refractor (D = 110 mm, 90x). The instants of entering the umbra and re-appearance from it of lunar formations are given.

Translator's note: This is the full translation of the original Russian abstract.

Card 1/1

ALEKSANDROVICH, Yu.R.

Observations of occultations of stars in Odessa. Astron. tsir.
no.199:29-30 Ja '59, (MIRA 13:2)

1. Odesskoye otdeleniye Vsesoyuznogo astronomo-geodezicheskogo
obshchestva,
(Occultations)

ALEKSANDROVICH, Yu.R.

Lunar eclipse of March 24-25, 1959. Astron.tsir. no.205:6-7 0
'59. (MIRA 13:6)

1. Odesskoye otdeleniye Vsesoyuznogo astronomo-geodezicheskogo ob-
shchestva.

(Eclipses, Lunar--1959)

ALEKSANDROVICH, Yu.R.

Minima of eclipsing variables. Astron. tsir. no.205:18-19 0
'59. (MIRA 13:6)

1. Odesskoye otdeleniye Vsesoyuznogo astronomo-gepdezicheskogo
obshchestva.

(Stars, Variable)

ALEKSANDROVICH, YU.R.

Observations of lunar occultations of stars in Odessa in 1959.
Astron. tsir. no. 211:30-31 My '60. (MIRA 13:10)

1. Odesskoye otdeleniye Vsesoyuznogo astronomo-geodezicheskogo
obshchestva.

(Occultations)

ALEKSANDROVICH-MEL'NIKOVA, A.S.; KHRAMOVA, S.N.

Hematoxylin as a specific reagent to bismuth. Trudy Astr. tekhn.
inst. ryb. prom. i khoz. no.8:82-88 '62. (MIRA 17:8)

ALEKSANDROVICH-MEL'NIKOVA, A.S.; ZHIGALKINA, T.S.

Trilonometric determination of copper and nickel with the help
of fumaric acid-pyridine precipitator. Trudy Astr. tekhn. inst.
ryk. prom. i khoz. no.8:89-96 '62. (MIRA 17:8)

CHERKESOV, A.I.; ALEKSANDROVICH-MEL'NIKOVA, A.S.

Complexometric determination of copper in minerals by the
metal indicator hematoxylin. Trudy Astr. tekhn. inst. ryb.
prom. i khoz. no.8:97-103 '62. (MIRA 17:8)

ALEKSANDROVICH-MEN'NIKOVA, A.S.; SOBKINA, M.I.

Determination of the hardness of table salt, used salt and
brine. Trudy Astr. tekhn. inst. ryb. prom. i khoz. no.8:104-
112 '62. (MIRA 17:8)

ALEKSANDROVICH-MEL'NIKOVA, A.S.

Foundations of quick methods for the analysis of detergents.
Trudy Astr. tekhn. inst. ryb. prom. i khoz. no.8:113-122 '62.
(MIRA 17:8)

ALEKSANDROVICH-MEL'NIKOVA, A.S.

Complexometric method for determining the calcium and magnesium content of salt using hydron II as a metal indicator. Izv. vys. ucheb. zav.; pishch. tekhn. no.2:167-169 '63. (MIRA 16:5)

1. Astrakhanskiy tekhnicheskii institut rybnoy promyshlennosti i khozyaystva, kafedra khimii.
(Calcium—Analysis) (Magnesium—Analysis) (Salts)

ALEKSANDROVICH-MEL'NIKOVA, A.S.; CHERNOGORTSEV, A.P.

Microvolumetric argentometric determining of the salt
content of food products. Izv. vys. ucheb. zav.; pishch.
tekh. no.6:144-146 '63. (MIRA 17:3)

1. Astrakhanskiy tekhnicheskiy institut rybnoy promysh-
lennosti i khozyaystva, kafedra neorganicheskoy i analiti-
cheskoy khimii i kafedra tekhnologii rybnykh produktov.

SHEPSHELEVICH, V. L.; ALEKSANDROVSKAYA, A. A.

Chairs

New method for finishing curved chairs with "nitrolac." Der. i lesokhim. prom 1,
No. 8, 1952.

9. Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

SOV/51-7-2-27/34

AUTHORS: Godnev, I.N., Aleksandrova, ~~Avil~~, and Rigina, I.V.

TITLE: Frequencies of Normal Vibrations of Zirconium Halides (Chastoty normal'nykh kolebaniy galogenidov tsirkoniya)

PERIODICAL: Optika i spektroskopiya, 1959, Vol 7, Nr 2, pp 271-273 (USSR)

ABSTRACT: Calculation of frequencies of normal vibrations of TiI_4 was reported earlier (Ref 1). The present paper describes solution of a similar problem for zirconium halides. The authors used curves of the reduced induction coefficients plotted as a function of the atomic weight of the central atom; these curves were constructed separately for fluorides, chlorides, bromides and iodides. The interatomic distances were determined, as in Ref 1, by plotting the dependence of these distances as a function of the atomic number Z of the peripheral atom; the curve for zirconium halides was drawn above the SnX_4 curve through a point $r = 2.33 \text{ \AA}$ which represents the Zr-Cl interatomic distance in $ZrCl_4$. The interatomic distances r found in this way are listed in Table 1. Table 2 gives the calculated induction coefficients for $ZrCl_4$, $ZrBr_4$ and ZrI_4 . The normal vibrational frequencies of the four halides $ZrCl_4$, $ZrBr_4$, ZrI_4 and ZrF_4 found using the coefficients of Table 2 and equations given

Card 1/2

Frequencies of Normal Vibrations of Zirconium Halides

SOV/51-7-2-27/34

earlier (Ref 1) are listed in Table 3. For ZrF_4 the method used requires extrapolation of the induction coefficients and, therefore, it gives only the limits between which lie the normal vibrational frequencies ν_1 , ν_2 and ν_4 of this compound. The errors in the calculated frequencies of $ZrCl_4$, $ZrBr_4$ and ZrI_4 are estimated to be $\Delta\nu_1 = \pm 20$, $\Delta\nu_2 = \pm 10$, $\Delta\nu_3 = \pm 30$ and $\Delta\nu_4 = \pm 10$ cm^{-1} . The method described was checked by calculating the normal vibrational frequencies of $SiCl_4$, $SiBr_4$ and SiI_4 (see Table 4 for data on $SiCl_4$). The calculated and experimental values of the $SiCl_4$ frequencies were found to agree within 1-7 cm^{-1} , except for ν_3 where the difference was 25 cm^{-1} . In the case of zirconium halides the calculated frequency $\nu_1 = 382$ cm^{-1} for $ZnCl_4$ also agrees well with the experimental value of 383 cm^{-1} . There are 4 tables, 1 figure and 11 references, 4 of which are Soviet, 6 English and 1 French.

SUBMITTED: February 23, 1959

Card 2/2

ALEKSANDRO SHAYA, A.M.; RIMINA, I.V.; GORDIN, I.I.

Normal vibration frequencies of lead halides. Opt. i spektr. 7
no. 6:844-846 D '59. (MIRA 14:2)
(Lead halides—Spectra)

ALEKSANDROVSKAYA, A.M.; GODNEV, I.N.

Tentative orientation prediction of normal vibration frequencies
of hafnium halides. Opt. 1 spektr. 9 no.2:273-275 Ag '60.
(MIRA 13:8)

(Hafnium halides)

GODNEV, I.N.; ALEKSANDROVSKAYA, A.M.

Use of the curves $\nu = f(Z_x)$ for the study of the vibrational
spectra of tetrahedral molecules and ions of the form $X(\text{Hal})_4$.
Opt. i spektr. 10 no. 1:27-32 Ja '61. (MIRA 14:1)
(Halides--Spectra) (Ions--Spectra)

ALEKSANDROVSKAYA, A.M.; ALESHONKOVA, Yu.A.; SINITSYNA, L.N.; GODNEV, I.N.

Thermodynamic functions of silicon tetraiodide and zirconium tetraiodide in the gaseous state. *Izv.vys.ucheb.zav.; khim.i khim.tekh.* 5 no.1:171-172 '62. (MIRA 15:4)

1. Ivanovskiy khimiko-tekhnologicheskii institut, kafedra fiziki.
(Silicon iodide) (Zirconium iodide)

S/076/62/036/012/001/014
B101/B180

AUTHORS: Godnev, I. N., Aleksandrovskaya, A. M., and Sverdlin, A. S.
(Ivanovo)

TITLE: Correspondence between the force constants of XY_4 and XY
molecules, where X is a IVB subgroup element and Y a halogen

PERIODICAL: Zhurnal fizicheskoy khimii, v. 36, no. 12, 1962, 2609 - 2615

TEXT: The coefficients k_q of XY_4 molecules are compared with the force constants k of XY molecules for halogen (Y) compounds of elements (X) of the IVB subgroup. Approximate equations are derived for calculating the dynamic coefficients of XY_4 molecules by M. Larnaudie's method (J. Phys.

et radium, 15, 365, 1954): $k_1 = k_q + 3h = \nu_1^2/\epsilon_y$, $k_2 = k_\alpha - 2l - 0 = \nu_2^2/\epsilon_0^2$,
 $k_{11} = k_q - h \approx \nu_3^2/A_{11} + A_{12}^2 \nu_4^2/A_{11}|A|$; $k_{12} = \sqrt{2}(a - b) \approx -A_{12} \nu_4^2/|A|$;
 $k_{22} = k_\alpha - 0 \approx A_{11} \nu_4^2/|A|$ (1), where k_1 and k_2 are the reduced dynamic coefficients of the one-dimensional blocks, k_{11} , k_{12} , and k_{22} are the
 Card 1/3

Correspondence between ...

S/076/62/036/012/001/014
B101/B180

reduced coefficients of the two-dimensional block A_{11} , A_{12} , and A_{22} are the kinematic coefficients of the two-dimensional block. For the other symbols see M. V. Vol'kenshteyn, M. A. Yel'yasher, and B. I. Stepanov, Kolebaniya molekul (Vibrations of molecules); v. I., Gostekhteorizdat, M., 1949. System (1) produced values for the force constants of CCl_4 , CBr_4 , SiF_4 , GeCl_4 , GeBr_4 , and CF_4 which were consistent with published figures. The relation $k_q \approx k_e + 0.4$ was obtained for chlorides, bromides, and iodides by comparing the k_q coefficients of halogen compounds of C, Si, Ge, Sn, and Pb with the k_q coefficients of diatomic molecules obtained by Y. P. Varshni (J. Chem. Phys., 28, 1081, 1958). Comparison of r_e the interatomic distances for diatomic molecules with r_q for XY_4 molecules yields $r_e > r_q$ for iodides and $r_e < r_q$ for fluorides up to GeF_4 . The course of r_e and r_q as a function of Z_y at constant X (Fig. 3) can be used for determining r_q of PbF_4 , PbBr_4 , and SnF_4 . There are 1 figure and 3 tables. The most important English-language references are: Y. Morino, Y. Nakamura a. T. Card 2/3

Correspondence between ...

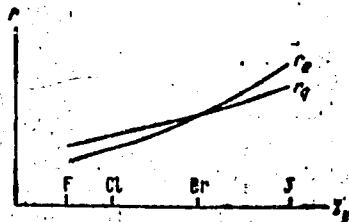
S/076/62/036/012/001/014
B101/B180

Jijima, J. Chem. Phys., 32, 643, 1960; C. W. F. T. Pistorius, J. Chem. Phys., 28, 514, 1958.

ASSOCIATION: Ivanovskiy khimiko-tehnologicheskij institut (Ivanovo Institute of Chemical Technology)

SUBMITTED: March 4, 1961

Fig. 3. r_e and r_q as functions of Z_y .



Card 3/3

GODNEV, I. N.; ALEKSANDROVSKAYA, A. M.; SVERDLIN, A. S.

Correspondence of the force constants of the molecules XY_4 and XY , where X element belongs to the subgroup IV b, and Y - is a halogen. Zhur. fiz. khim. 36 no.12:2609-2615 D '62. (MIRA 16:1)

1. Ivanovskiy khimiko-tekhnologicheskii institut.

(Halides) (Molecular dynamics)

L 11059-63

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

ACCESSION NR: AP3000480

S/0153/63/006/001/0165/0166

AUTHOR: Aleksandrovskaya, A. M.; Godnev, I. N.; Sverdlin, A. S. 35

TITLE: Thermodynamic functions of hafnium halides

SOURCE: Izv. VUZ: Khimiya i khim. tekhnologiya, v. 6, no. 1, 1963, 165-166

TOPIC TAGS: thermodynamic functions, enthalpy function, free energy function, entropy, specific heat, Hf chloride, Hf bromide, Hf iodide

ABSTRACT: As a supplement to their previous tabulation of the thermodynamic functions of iodides of fourth group elements, authors present a tabulation of the thermodynamic functions of hafnium iodide, hafnium chloride, and hafnium bromide. These were calculated from vibrational frequencies found by the method of A. M. Aleksandrovskaya and I. N. Godnev (Optika i spektroskopiya, 9, 273, 1960), using the interatomic separations found in the same article. Experimental (calorimetric) and calculated entropy values for Hf-chloride at 485 and 496K agree to within 0.5%. Orig. art. has: 3 tables.

ASSOCIATION: Kafedra fiziki, Ivanovskiy khimiko-tekhnologicheskij institut (Department of Physics, Ivanovskiy Chemical Technological Institute)

Card 1/2/

ALEKSANDROVSKAYA, A.M.; GODNEV, I.N.

Normal vibration frequencies of $ZnCl_4^{2-}$, $CaCl_4^{2-}$, $HgBr_4^{2-}$, HgI_4^{2-}
ions. Zhur. fiz. khim. 37 no.5:1113-1115 My '63. (MIRA 17:1)

1. Ivanovskiy khimiko-tekhnologicheskii institut.

BYDEL'MAN, S.Ya., starshiy nauchnyy sotrudnik, kand.tekhn.nauk;
ALEKSANDROVSKAYA, E.K., inzh.

Some results of in situ observations on the temperature
regimen and strained state of the concrete lock block of
the Novosibirsk Hydroelectric Power Center. Izv.VNIIG 61:
144-158 '58. (MIRA 13:6)
(Concrete construction---Testing)
(Novosibirsk---Locks(Hydraulic engineering))

EYDEL'MAN, S.Ya., starshiy nauchnyy sotrudnik, kand.tekhn.nauk;
ALEKSANDROVSKAYA, E.K.

Measuring ground stresses in the foundation of the lock chamber of
the Novosibirsk Hydroelectric Power Station. Izv.VNIIG 62:157-163
'59. (MIRA 13:6)

(Foundations)
(Novosibirsk--Locks (Hydraulic engineering))

YURATSKAYA, Ye.G., kand.meditsinskikh nauk; KHATCHENKO, N.V., vrach;
ALEKSANDROVSKAYA, K.F., vrach

Etiopathogenesis of chondrodystrophy. Dzrav. Belor. 6
no. 7:13-15 Je '60. (MIRA 13:8)

1. Iz kliniki nervnykh bolezney Minskogo meditsinskogo
instituta (zaveduyushchiy kafedry - professor M.A. Khazanov).
(RICKETS, FETAL)

YURATSKAIA, Ye.G.; KHATCHENKO, N.V.; ALEKSANDROVSKAYA, K.F.

Etiology and pathogenesis of multiple cartilagenous exostoses.
Khim. med. 38 no.5:134-137 My '60. (MIRA 13:12)
(EXOSTOS)

YEFIMOVA, N.P.; MAL'TSEVA, Z.I.; LOSEVA, T.A.; ALEKSANDROVSKAYA, L.A.

Electro- and immunophoretic study of antitoxic sera. Zhur.
mikrobiol.epid.i immun. 32 no.1:77-81 Ja '61. (MIRA 14:6)

1. Iz Permskogo instituta vaktsin i syvorotok.
(SERUM)

CHUNTYZHEV, Kh.O.; PRONIN, S.V.; LISOVSKIY, Yu.P.; MARTYNOV, V.D.;
MARKARYAN, S.B.; FARIZOV, I.O.; ALEKSANDROVSKAYA, L.I.;
USOV, G.A.; TIMUR, M.; YURLOV, P.P.; AFANAS'YEV, L.N.,
otv. red.; GARSIA, L., red.; DARONYAN, M., mladshiy red.;
NOGINA, N., tekhn. red.

[Agricultural cooperation under the conditions of capitalism]
Sel'skokhoziaistvennaia kooperatsia v usloviakh kapitaliz-
ma. Moskva, Sotsekgiz, 1963. 350 p. (MIRA 16:9)

1. Akademiya nauk SSSR. Institut mirovoy ekonomiki i mezhdunarodnykh otnosheniy.
(Agriculture, Cooperative) (Capitalism)

COUNTRY : USSR
CATEGORY : Plant Physiology. Water Regimen. I
ABS. JOUR. : RZhBiol., No. 6 1959, No. 24555
AUTHOR : Aleksandrovskaia, L.N.
INST. : Chelyabinsk State Ped. Inst.
TITLE : Concerning the Rate of Transpiration of Upland Xerophytes of the Central Caucasus
ORIG. PUB. : Uch. zap. Chelyab. gos. ped. inst., 1957, 3, No. 1, 99-110.
ABSTRACT : Xerophytes growing in cold, dry conditions in the high altitudes of Kabarda were characterized by a low rate of transpiration (~350 milligrams an hour per gram of wet weight), determined by a three-minute suspension in technical scales. There was also little evaporation in such Semi-xerophytes as *Medicago falcata*, which, according to data of Maksimov and Menkel, was characterized by a high rate of transpiration. Within a day the rate of transpiration varied negligibly (with the exception

CARD: 1/2

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ALEKSANDROVSKAYA, L.N.; POTANINA, N.D.

Water balance of apple and pear seedlings during the winter in the southern trans-Ural region. Trudy Inst. biol. UFAN SSSR no. 25:75-81 '61. (MIRA 15:6)

(Ural Mountain region--Apple--Water requirements)
(Ural Mountain region--Pear--Water requirements)
(Plants--Frost resistance)

ALEKSANDROVSKAYA, L.N. (Chelyabinsk)

Critical moisture content of the shoots of fruit trees in
the winter in the Southern Urals. Bot. zhur. 48 no.6:823-829
Je '63. (MIRA 17:1)

ALEKSANDROVSKAYA, L.N.

Critical moisture content of the shoots of fruit trees during
winter in the Southern Urals. Trudy Inst. biol. UFAN SSSR
no. 43:121-125 '65
(MIRA 19:1)

1. Chelyabinskiy pedagogicheskiy institut.

ALEKSANDROVSKAYA, L.P., narodnaya artystka SSSR.

Long live our motherland! Rab. i sial. 31 no.12:1 D '55.
(Russia—Economic conditions) (MLRA 9:4)

ALEKSANDROVSKAYA, M. A.

Aleksandrovskaya, M. A. - "Defects in the cocoon cases of silkworms", Nauch.-
issled. trudy (Mosk. tekstil. in-t), Vol. XI, 1948, p. 140-48, - Bibliog: 6 items.

SO: U-3042, 11 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 8, 1949).

Aleksandrovskaya, M. A. -- "Faults in Pronunciation among Children of the Older Preschool Age." Acad Pedagogical Sci RSFSR, Sci Res Inst of Defectology, Moscow, 1955 (Dissertation for Degree of Candidate in Pedagogical Sciences.)

SO: Knizhnaya Letopis', No. 23, Moscow, Jun 55, pp 87-104

ALEKSANDROVSKAYA, M.A.; BOLYSHEV, N.N.; TYURDENEVA, S.A.

Fractionation of humus in connection with the study of the
genesis of gray meadow soils of the Volga Delta. Nauch.dokl.
vys.shkoly; biol.nauki no.1:210-215 '59. (MIRA 12:5)

1. Rekomendovana kafedroy pochvovedeniya Moskovskogo gosudar-
stvennogo universiteta im. M.V.Lomonosova.
(VOLGA DELTA--SOILS--ANALYSIS) (HUMUS)

ALEKSANDROVSKAYA, M.M.

Finishing furniture by dipping in nitro lacquer. Der. prom. 6 no. 5:
5-8 My '57. (MIRA 10:6)

(Lacquer and lacquering)

ALEKSANDROVSKAYA, M.M., inzh.

New method of applying nitrocellulose coatings to wooden parts.
Trudy MTEI no.7:301-315 '57. (MIKA 11:5)
(Wood--Preservation) (Nitrocellulose)

ALEKSANDROVSKAYA, M. M., Cand Tech Sci -- (diss) "Study of
the process of ^{the} finishing parts of furniture with nitrolacquer
by ~~using~~ the dipping method." Mos, 1958. 15 pp with graphs
(Min of Higher Education USSR, Mos Forestry Engineering Inst),
125 copies (KL, 35-58, 107)

SHEPSHELEVICH, V.L.; ALEKSANDROVSKAYA, M.M.

Lacquer for finishing products by the dipping method, and conditions of its application. Lakokras.mat.1 ikh prim. no.5:61-64 '60.

(Lacquer and lacquering)

(MIRA 13:11)

S/636/61/000/000/011/013
D298/D303

AUTHOR: Aleksandrovskaia, M.M.

TITLE: Histopathological features of changes in the central nervous system at late periods of white rats, irradiated during embryogenesis

SOURCE: Piontkovskiy, I.A. Vliyaniye ioniziruyushchego izlucheniya na funktsiyu vysshikh otdelov tsentral'noy nervnoy sistemy potomstva. Moscow, Medgiz, 1961, 173-184

TEXT: Morphology studies were conducted, using 25 experimental and 5 control animals. The baby rats were irradiated interuterinely, on the 12th day of embryonic development, with gamma rays from the ГГТ - Co - 50 - 1 (GUT - Co - 50 - 1) unit. The mother rat received a total dose of 200 r. A microscopic study of the brain of these animals was carried out by the staining methods, of nerve cells, fibers, RNA, synapses, astrocytes, oligodendrogly, microgly and argirophyllic grains. The brain was studied at 11 and 16 months after birth. It was established macroscopically that the cortex of the cerebral hemispheres was underdeveloped; the weight of the
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Histopathological features of ...

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D298.D303

brain in the experimental animals was 200 - 250 mg lighter. The sub-cortex formations were reduced. Hydrocephaly was noted 165 months after birth in 4 of the animals. Three groups of animals were recognized according to the degree of morphology changes. The first group was characterized by a cell rarefaction in the outer and particularly deep layers of the cerebral hemisphere cortex, resulting in destruction of the cytoarchitecture of the cortex with signs of cell devastation in the case of the experimental animals. The second group of experimental animals included 8 blind rats, surviving for 16 months. A microscopic analysis of the brain in the frontal and dorsal sections of the hemispheres showed a sharp wrinkling of the nerve cells with stopper-type growths. The blind animals were shown to have anoxic encephalopathy in the brain. Four animals, representing the third group, revealed an accumulation of translucent fluid under the hard cerebral membrane, severe atrophy of the brain and hydrocephaly. It was established morphologically that the greatest changes take place in the animals depending not only on specific conditions of development of the neuroblasts and spongioblasts during the period of differentiation, but also on the

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Histopathological features of ...

S/636/61/000/000/011/013
D298/D303

complications occurring in the form of an increasing edema of the brain and on toxic - anoxic and exchange changes developing in the different structures of the brain. The following general conclusions were made: 1) After gamma - irradiation of the pregnant rat, with a 200 r dose, the offspring in later stages show a malformed cortex of the cerebral hemispheres, the crust and striation. Hydrocephaly is noted in some cases. 2) A microscopic analysis of the histopathological changes (first group) showed severe dystrophy changes of the nerve cells. There is a drop in the RNA reaction intensity, and a change in the argirophylic grains. The gliose reactions of a productive-dystrophy nature are connected with exchange and toxic destructions of the brain fibers. 3) In 8 experimental animals (5 with anophthalmy and 3 with monophthalmy), microscopic investigations showed even stronger morphology changes than in the first group. 4) The microscopic analysis of the brain in hydrocephalies indicates a cortex atrophy and underdevelopment or absence of the 5th and 6th cortex layers of the cerebral hemispheres. The histology changes are expressed through endema of the brain membranes and vascular plexus with the presence of subarachnoidal cysts,

Card 3/4

ALEKSANDROVSKAYA, M.M.

Age-related changes of the brain and diseases connected with
them. Trudy MOIP.Otd.biol. 6:124-134'62. (MIRA 16:7)

1. Institute of Higher Nervous Activity and Neurophysiology
Academy of Sciences of the USSR., Moscow.
(BRAIN--DISEASES) (BRAIN--AGING)

ALEKSANDROVSKAYA, M.M.

Morphological data on the state of structural tissue elements of the brain following the implantation of electrodes. Zhur. vys. nerv. deiat. 12 no.4:727-733 J1-Ag '62.

(MIRA 17:11)

1. Laboratory of Morphology of Central Nervous System, Institute of Higher Nervous Activity and Neurophysiology, U.S.S.R. Academy of Sciences, Moscow.

ASRATYAN, E.A., otv. red.; ALEKSANDBOVSKAYA, M.M., red.; ALEKSEYEV,
M.A., red.; RUSINOV, V.S., red.; IVANOVA, N.G., red.;
STRUGHKOV, M.I., red. izd-va; SHEVCHENKO, G.N., tekhn. red.

[Nervous mechanisms of conditioned reflex activity] Nervnye
mekhanizmy uslovnoreflektornoj deiatel'nosti. Moskva, Izd-
vo AN SSSR, 1963. 319 p. (MIRA 16:10)

1. Akademiya nauk SSSR. Institut vysshey nervnoy deyatel'-
nosti i neurofiziologii.
(CONDITIONED RESPONSE)

ALEKSANDROVSKAYA, M.M.; GEYNISMAN, Yu.Ya.; SANOYLOVA, L.G.

Morphophysiological data on the analysis of the mechanism of the effect of amirazine on the central nervous system. Zhur. vys. nerv. doiat. 14 no.5:911-919 S-O '64.

(MIRA 17:12)

1. Laboratory of Morphology of the Central Nervous System and Conditioned Reflexes, Institute of Higher Nervous Activity and Neurophysiology, U.S.S.R. Academy of Sciences, Moscow.

ALEKSANDROVSKAYA, M.M.; GEYNISMAN, Yu.Ya.; MATS, V.N.

Glia-neuronal relations during intensified functioning of the neurons according to morphological research data. Zhur. nevr. i psikh. 65 no.2:161-167 '65. (MIRA 18:9)

1. Laboratoriya morfologii Tsentral'noy nervnoy sistemy (zaveduyushchiy - prof. M.M. Aleksandrovskaya) Instituta vysshey nervnoy deyatel'nosti i neyrofiziologii (direktor - prof. E.A. Asratyan) AN SSSR, Moskva.

L 55981-65

ACCESSION NR: AP5018501

UR/0020/64/159/003/0680/0681

AUTHOR: Aleksandrovskaya, M. M.; Geynisman, Yu. Ya.; Mats, V. N. 78

TITLE: Morphological data on the effect of enhanced functioning on the state of the synaptic apparatus of spinal motor neurons

SOURCE: AN SSSR. Doklady, v. 159, no. 3, 1964, 680-681

TOPIC TAGS: experiment animal, morphology, neurology, nervous system

Abstract: Rats were killed after they had swum for 40 min in water at a temperature of 33-34°. The lumbar thickening of the spinal cord of these rats and of control rats was stained with Ag. The number of annular synapses of the motor neurons was then counted both in the bodies of the neurons and their dendrites. Counts were carried out on five cross-sections from the sixth lumbar to the first sacral segment of the spinal cord. The number of stained synapses was greater for experimental than for control animals. However, the increase in the number of stained synapses did not actually correspond to an increase in the number of synapses as a result of enhanced functioning during exercise; the number of neurofilaments, which is known to change depending on the functional state of the synaptic apparatus, became greater, and the state of the protein in them changed, so that the affinity to Ag increased and more rings impregnated with Ag could be observed.

Orig. art. has 1 table.

L 55941-65
ACCESSIGN NR: AP5018501

ASSOCIATION: Institut vysshey nervnoy deyatel'nosti i neyrofiziologii Akademii nauk SSSR (Institute of Higher Nervous Activity and Neurophysiology, Academy of Sciences SSSR)

SUBMITTED: 05Apr64

ENCL: 00

SUB CODE: LS

NO REF SOV: 004

OTHER: 010

JPRS

Card 2/2

MP

L 1596-66

ACCESSION NR: AP5024775

UR/0219/64/058/009/0080/0086

AUTHOR: Aleksandrovskaya, M. M.; Geynisman, Yu. Ya.; Samoylova, L. G. 20B

TITLE: Structural and metabolic changes of the brain of animals with disturbances of higher nervous activity following repeated administration of chlorpromazine

SOURCE: Byulleten' eksperimental'noy biologii i meditsiny, v. 58, no. 9, 1964, 80-86

TOPIC TAGS: medical experiment, rat, brain, central nervous system, chlorpromazine, biologic metabolism, neurology

ABSTRACT: Thirty-five male white rats received daily injections of 5 milligrams/kilogram of chlorpromazine for a period of 30 days. During the first 3 weeks there was a depression of the conditioned reflex activity and marked histological and histochemical changes in the cerebral cortex, the diencephalon nuclei, and stem reticular formations. By the 30th day, the disturbances of higher nervous activity and the microscopic brain lesions became less pronounced. For 3 weeks after injections were stopped there was increased excitation of the higher parts of the central nervous system, and

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ACCESSION NR: AP5024775

the brain's structural and metabolic changes acquired a different character, being chiefly localized in the cortical neurons. On the 60th day, the animals' behavior, conditioned reflex activity, and state of cerebral tissue did not differ from those of the controls. It is concluded that the functional, metabolic and structural changes of the higher parts of the central nervous system of animals caused by repeated administration of chlorpromazine are reversible. Orig. art. has:12 figures, 1 table.

ASSOCIATION: Laboratoriya morfologii tsentral'noy nervonoy sistemy, Instituta vysshey nervonoy deyatel'nosti i neyrofiziologii, AN SSSR. Moscow (Laboratory of the Morphology of the Central Nervous System, Institute of Higher Nervous Activity and Neurophysiology); Laboratoriya uslovnykh reflektsov, Instituta vysshey nervonoy deyatel'nosti i neyrofiziologii, AN SSSR. Moscow (Laboratory of Conditioned Reflexes, Institute of Higher Nervous Activity and Neurophysiology)

SUBMITTED: 08Jul63

ENCL: 00

SUB CODE: LS

NR REF SOV: 010

OTHER: 013

JPRS

Card 2/2 *SP*

ALEKSANDROVSKAYA, M. M.

Aleksandrovskaya, M. M. "On particular types of arteriosclerosis and vascular dystonia,"
Trudy Tsentr..in-ta psikhiatrii, Vol. IV, 1949, p. 191-205

SO: U-4934, 29 Oct. 53, (Letopis 'Zhurval 'nykh Statey, No. 16, 1949).

ALEKSANDROVSKAYA, M. M. (Prof.)

"Microscopic Variations of the Brain in Cancerous Emaciation,"
Arkhir. Patol. 11, No. 3, 1949.

Mbr., Sect. Pathology, Central Nervous System, Central Inst., Psychiatry,
Min. Public Health RSFSR,

ALEKSANDROVSKAYA, M.M.

Histopathological Changes of the Central Nervous System in Malignant Hypertension Accompanied by Psychotic Conditions, M.M.Aleksandrovskaya, State Int. of Psychiatry, Min. of Health, RSFSR. Arkhiv Patol, Vol.14, no.4, pp 56-66, Jul-Aug '52.

Malignant hypertension accompanied by neuropsychotic disturbances may occur in the absence of arteriosclerotic nephrosclerosis. In addition to vascular changes, extensive modifications of all cerebral tissue structure formations are invariably encountered in hypertension. Hypertension must be regarded as a well-defined nosological entity in which affliction of the central nervous system is the principal factor. This is confirmed by physiological, histopathological, and histochemical data.

262T8

ALEKSANDROVSKAYA, M.M.

Problem of globular paraplastic formations in the central
nervous system. Usp. sovrem. biol. 34 no.2:288-290 1952.
(CML 25:5)

1. Moscow.

ALEKSANDROVSKAYA, M.M. (Dr. of Med. Sci.) Mariya Moiseyevna

Role of histopathology of the central nervous system in the light
of Pavlov's theories on higher nervous functions. Zhur. vys. nerv.
deiat. 4 no.1:85-92 Ja-F '54. (MLRA 7:8)

1. Institut vysshey nervnoy deyatel'nosti Akademii nauk SSSR.
(CENTRAL NERVOUS SYSTEM, pathology.
*histopathol., role in Pavlovian theory on higher nervous
funct.)

ALEKSANDROVSKAYA, M.M.

Problem of argyrophil granularity in paraplastic formations of
the central nervous system. Zhur.nevr. i psikh. 54 no.2:179-188
F '54. (MIRA 7:3)

1. Institut vysshey nervnoy deyatel'nosti Akademii nauk SSSR.
(Nervous system) (Stains and staining (Microscopy))

ALEKSANDROVSKAYA, M.M.

[Vascular changes in the brain during various pathological states;
morphological research] *Sosudistyie izmeneniia v mozgu pri razlichnykh
patologicheskikh sostoianiiakh; morfologicheskie issledovaniia.*
Moskva, Medgiz, 1955. 307 p. (MIRA 9:6)
(BRAIN--BLOOD SUPPLY)

ALEKSANDROVSKAYA, M.M.
ALEKSANDROVSKAYA, M.M.; SAKHYULINA, G.T.

Histopathologic changes in the central nervous system in dogs
following prolonged anemia. Izv. AN SSSR. Ser.biol. no.1:82-93
Ja-F '55. (MIRA 8:3)

1. Institut vysshey nervnoy deyatel'nosti Akademii nauk SSSR.
(ANEMIA, experimental,
CNS hist. changes in dogs)
(CENTRAL NERVOUS SYSTEM, physiology,
eff. of anemia in dogs)

ALEKSANDROVSKAYA, M.M.

Histopathological changes in the central nervous system in white
rats in experimental staphylococcal intoxication and infection.
Trudy Inst.vys.nerv.deiat. Ser.patofiziol. 3:317-324 '57.
(NERVOUS SYSTEM--DISEASES) (MIRA 10:8)
(STAPHYLOCOCCUS)

ALEKSANDROVSKAYA, M.M.

ALEKSANDROVSKAYA, M.M.

Histopathological changes in the central nervous system in experimental diphtherial intoxication in white rats. Trudy Inst.vys.nerv.deiat. Ser.patofiziol. 3:325-335 '57. (MIRA 10:8)
(NERVOUS SYSTEM--DISEASES) (DIPHTHERIA)

ALEKSANDROVSKAYA, M.M., prof:

Some data on the effect of ionizing radiation on the morphology
of the central nervous system in animals. Trudy Inst.vys.
nerv. deiat. Ser. patofiziol. 4:211-225 '58 (MIRA 11:12)

1. Zaveduyuchchaya kabinetom morfologii mozga Instituta vysshey
nervnoy deyatel'nosti AN SSSR.
(X RAYS--PHYSIOLOGICAL EFFECT)
(NERVOUS SYSTEM)

ALEKSANDROVSKAYA, M.M., prof.

Histopathological changes in the central nervous system of animals exposed to ionizing radiation while suffering from intoxications and infections. Trudy Inst.vys. nerv.deiat. Ser. patofiziol.4:226-237 '58 (MIRA 11:12)

1. Zaveduyushchaya kabinetom morfologii mozga Instituta vysshey nervnoy deyatel'nosti AN SSSR.
(NERVOUS SYSTEM)
(X RAYS--PHYSIOLOGICAL EFFECT)
(INFECTION)

ALEKSANDROVSKAYA, M.M.

Some morphological changes in the central nervous system of white rats irradiated during the antenatal period. Med.rad. 4 no.11:10-14 N '59.

(MIRA 13:2)

1. Iz laboratorii morfologii mozga (zaveduyushchiy - prof. M.M. Aleksandrovskaya) Instituta vysshey nervnoy deyatel'nosti AN SSSR.

(CENTRAL NERVOUS SYSTEM radiation effects)

(RADIATION EFFECTS experimental)

(FETUS radiation effects)

~~ALEKSANDROVSKAYA, H.H.~~

Microscopic study of the central nervous system of white rats
treated with penicillin in staphylococcal intoxication. Trudy
Inst.vys.nerv.deiat.Ser.patofiziol. 6:303-309 '59.
(MIRA 12:10)

(NERVOUS SYSTEM)
(STAPHYLOCOCCAL INFECTIONS)
(PENICILLIN)

ALEKSANDROVSKAYA, M.M.

Morphological changes of the central nervous system in some
experimentally induced intoxications and infections. Trudy
Inst.vys.nerv.deiat.Ser.patofiziol. 6:310-323 '59.

(MIRA 12:10)

(NERVOUS SYSTEM)

(BACTERIA, PATHOGENIC)

ALEKSANDROVSKAYA, M.M.

Effect of various doses of ionizing radiations on the morphology of
the brain in animals following total-body irradiation. Voen.-med.zhur.
no.8:79-81 Ag '59. (MIRA 12:12)

1. Iz Instituta vysshey nervnoy deyatel'nosti AN SSSR.
(BRAIN radiation eff.)

ALEKSANDROVSKAYA, M.M.

Comparative pathohistological changes in the central nervous system in white rats following local and total-body irradiation with gamma rays. Trudy Inst.vys.nerv.dsiat. Ser.fiziol. 4:244-256 '60. (MIRA 13:7)

1. Iz Kabineta morfologii mozga Instituta vysshey nervnoy deyatel'nosti AN SSSR Zaveduyushchiy kabinetom - M.M. Aleksandrovskaya. (NERVOUS SYSTEM) (GAMMA RAYS--PHYSIOLOGICAL EFFECT)

ALEKSANDROVSKAYA, M.M.; SHIRKOVA, G.I.

Morphological and functional changes in the central nervous system
in old monkeys (*Macaca rhesus*). Trudy Inst. vys. nerv. deyat. Ser.
fiziol. 5:238-249 '60. (MIRA 13:10)

1. Iz Kabineta morfologii mozga (zav. - M.M. Aleksandrovskaya)
instituta vysshey nervnoy deyatelnosti i Sukhumskey mediko-
biologicheskoy stantsii AMN SSSR (dir. - L.G. Voronin).
(NERVOUS SYSTEM) (CONDITIONED RESPONSE)

ALEKSANDROVSKAYA, M.M.

Effect of aminazine on the morphology of the central nervous system
under normal conditions. Zhur.nevr.i psikh 60 no.8:1027-1032 '60.
(MIRA 13:9)

1. Institut vysshey nervoy deyatel'nosti (direktor - prof.V.S.Rusinov)
AN SSSR, Moskva.
(CHLORPROMAZINE) (BRAIN)

SNESAREV, Pavel Yevgen'yevich, zasl. deyatel' nauki, prof.; AVTSYN, A.P.,
prof., otv. red.; SMIRNOV, L.I., prof., red. [deceased]; ~~ALEKSANDROV-~~
~~SKAYA, M.M., red~~; TSIVIL'KO, V.S., red.; GERGER, E.L., red.; IL'INA,
L.I., red.; KAZAKOVA, P.B., red.; KUZNETSOVA, V.I., red.; SOKOLOVA-
LEVKOVICH, A.P., red.; BEL'CHIKOVA, Yu.S., tekhn. red.

[Selected works] Izbrannye trudy. Moskva, Gos. izd-vo med. lit-ry
Medgiz, 1961. 462 p. (MIRA 14:7)

1. Chlen-korrespondent AMN SSSR (for Smirnov)
(NEUROLOGY)

ALEKSANDROVSKAYA, M.M.

Effect of staphylococcal intoxication on the morphology of the cortex
and subcortical formations in the central nervous system of dogs.

Trudy Inst. vys. nerv. deiat. Ser. patofiziol. no.9:174-182 '61.

(MIRA 15:4)

(STAPHYLOCOCCAL INFECTIONS) (BRAIN)

ALEKSANDROVSKAYA, M.M.

Morphological changes of the central nervous system and penicillin
therapy in staphylococcal infections. Trudy Inst. vys. nerv. deiat.
Ser. patofiziol. no.9:183-191 '61. (MIRA 15:4)
(STAPHYLOCOCCAL INFECTIONS) (PENICILLIN)
(BRAIN)

ALEK SANDROVSKAYA, M.M.

Morphological changes in the encephalon of animals following
implantation of electrodes. Dokl. AN SSSR 143 no.6:1442-1444
Ap '62. (MIRA 15:4)

1. Institut vysshey nervnoy deyatel'nosti i neyrofiziologii
AN SSSR. Predstavleno akademikom L.S.Shtern.
(ELECTROENCEPHALOGRAPHY)

ALESANDROVSKAYA, M.M.

ALKESANDROVSKAYA, M.M.

Morphological changes in the animal brain following local
introduction of strychnine. Zhur. vys. nerv. deiat. 13 no.5:
939-945 S-0'63 (MIRA 16:11)

1. Laboratory of Central Nervous System Morphology, Institute
of Higher Nervous Activity and Neurophysiology, U.S.S.R.
Academy of Sciences, Moscow.

L 47544-66 EWF(1) DD

ACC NR: AP6032286

SOURCE CODE: UR/0020/66/170/002/0482/0485

48
B

AUTHOR: Aleksandrovskaya, M. M.; Kholodov, Yu. A.

ORG: Institute of Higher Nervous Activity and Neurophysiology, Academy of Sciences, SSSR (Institut vysshey nervnoy deyatel'nosti i neyrofiziologii Akademii nauk SSSR)

TITLE: Possible role of neuroglia in the appearance of brain bioelectric reactions to a constant magnetic field

SOURCE: AN SSSR. Doklady, v. 170, no. 2, 1966, 482-485

TOPIC TAGS: UHF, electromagnetic biologic effect, brain biocurrent, bioelectric activity, EEG, glia, neuroglia, neuron, neurology, UHF biologic effect, ultrahigh frequency, electromagnetic field effect, EMF

ABSTRACT: The authors studied the reactions of neurons and glial cells in the brains of rabbits and cats to constant magnetic fields of 200—300 oe acting on the head alone. EEG's and functional tests (reactivity curves) were conducted on the animals, which were killed by aeroembolism or nembutal after 1, 10, and 60—70 hr of exposure for morphological studies of CNS tissue effects. Astrocytes were stained by Cahall's, oligodendrocytes and microglia by Aleksandrovskiy's, and neurons by Nissel's methods. After only 1 hr of exposure, the number of astrocytes and oligodendrocytes had increased and hypertrophy of cell bodies and dendrites was seen. The number of microglia had also increased. Neurons remained intact. Electrical activity of the motor cortex was dominated by slow activity with activity spikes. Increased slow-wave

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UDC: 612.822.5

L 47544-66

ACC NR: AP6032286

activity has also been noted in long-term exposure of salamanders and humans to constant magnetic fields. After 10 hr of exposure, the increased number of glial cells persisted. Acute hyperplasia was seen in astrocytes, as well as perivascular and marginal gliofibrosis with swelling of dendritic oligodendroglia and microglial productive reactions. Neurons suffered regressive changes (swelling and hyperchromatosis). EEG's of rabbits taken after 10-hr exposure were uneven. Slow waves and spikes disappeared from the low-amplitude part of the trace. After 60—70-hr exposure (3 to 7 hr/day) neuroglia showed productive-dystrophic changes with swelling of oligodendrocytes and the appearance of drainage cells. Neural cells also showed dystrophic changes. The morphological picture was that of hypoxic encephalopathy. Low-amplitude fluctuations dominated the electrical activity picture. It is supposed that the increased number of glial elements observed after exposure to a constant magnetic field is due not only to intensified cell division processes (amitotic astrocyte division was seen), but also to changes in the level of metabolism. In addition, microglial cells may migrate from other parts of the brain. A possible connection between neuroglial activity and slow brain bioelectrical processes has been suggested. No direct connection between the glia and spike activity could be established, but there are indications of a connection between the ultraslow rhythms and spiking activity seen in rabbit brains. The connection between inhibition processes and slow rhythms with spike activity appears to be much more tenuous. The relationship between inhibition processes and glial reactions under conditions of exposure to electromagnetic fields is most interesting. It is known that during intoxication, glial reactions are ordinarily accompanied by inhibition, except during physical loading, when they are accompanied by excitation processes. The

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ACC NR: AP6032286

glial reaction alone is therefore not an unambiguous index of the basic nervous processes accompanying them. Thus, the increased number of neuroglia without loss of intact neurons, appearance of slow rhythms in brain bioelectric activity, and increased threshold of light stimulation observed during exposure to constant magnetic fields may reflect various aspects of the appearance of inhibition processes in the CNS. [DP]

SUB CODE: 06/ SUBM DATE: 12Feb66/ ORIG REF: 015/ OTH REF: 005/ ATD PRESS: 5094

Card 3/3

ALEKSANDROVSKAYA, M.V.

Conference on problems in improving medical and sanitary services
for lumber workers in Kalinin Province. Zdrav.Roe.Feder. 3 no.6:
46-47 Je '59. (MIRA 12:6)
(KALININ PROVINCE--LUMBERMEN--MEDICAL CARE)