KAGAN, D.F., kand. tekhn.nauk; VANYAKIN, D.N., kand. tekhn. nauk; LOBACHEV, P.V., kand. tekhn. nauk; YEKHLAKOV, S.V., inzh.; PAVLOV, L.D., inzh.; RUZIN, M.Ya., inzh.; ANDREYEVA, I.N., inzh.; SHMAKOVA, G.D., inzh. Prinimali uchastiye: SAPOZHNIKOV, M.M., kand. tekhn. nauk; GEFDING, A.K., kand. tekhn. nauk; MALINOVSKIY, R.B., inzh.; STRASHNYKH, V.P., red. izd-va; KASIMOV, D.Ya., tekhn. red.

[Instructions for designing, installing, operating, and repairing interior water supply systems using vinyl plastic pipes] Ukazaniia po proektirovaniiu, montazhu, ekspluatatsii i remontu vnutrennikh vodoprovodov iz viniplastovykh trub. Moskva, Gos. izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1961. 91 p. (MIRA 15:2)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut sanitarnoy tekhniki. 2. Nauchno-issledovatel'skiy institut sanitarnoy tekhniki Akademii stroitel'stva i arkhitektury SSSR (for Kagan, Vanyakin, Lobachev, Yekhlakov, Pavlov, Ruzin, Andreyeva, Shmakova). 3. Leningradskiy nauchno-issledovatel'skiy institut Akademii kommunal'nogo khozyaystva im. K.D.Pamfilova (for Sapozhnikov). 4. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrotekhnicheskikh i sanitarno-tekhnicheskikh rabot (for Gefding). 5. Institut po proyektirovaniyu zhilishchno-grazhdanskogo stroitel'stva v g. Moskve (for Malinovskiy).
(Water pipes)

SINYAKOVA, G. V.

"Thermal Characteristic of Humic Acids," Dok. AN, 35, No. 2, 1942. c1942-.

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Dissertation: "Postoperative Impassability of Intestines."

17/1/50
Central Inst. for Advancement of Physicians

SO Vecheryaya Moskva
Sum 71

Orbits

Improved orbits of the planet (401) Ottilia. Biul. Inst. teor. astron. 4 no. 5, 1949.

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SHMAKOVA, M.Ya.

Absolute perturbations and new elements of planets 386, 417, 430 and 735. Biul. Inst. teor. astron. 6 no.1:46-56 '55.
(MIRA 13:3)

(Planets, Minor)

SHMAKOVA, M.Ya.; SOCHILINA, A.S.

Approximate determination of the circular orbit of an astroid.
Biul.Inst.teor.astron. 7 no.1:72-75 '58. (MIRA 13:4)
(Planets, Minor--Orbits)

SHMAKOVA, M.Ya.; SOCHILINA, A.S.

Elements of elliptic and circular orbits of unnumbered minor planets. Biul.Inst.teor.astron. 7 no.1:76-77 '58.
(MIRA 13:4)

(Planets, Minor--Orbits)

SHMAKOVA, M.Ya.

Numerical integration of the equations of motion of asteroids with the "Ural" electronic computer. Biul.Inst.teor.astron. 8 no.3:242-245 '61. (MIRA 14:11)
(Planets, Minor)

SHIAKOVA, N.L.; YARMONENKO, S.P.

Cytological analysis of the action of high-energy protons. Report No.1: Cellular degeneration and mitotic activity of the bone marrow in mice subjected to total body irradiation with 660 Mev protons. Radiobiologiia 3 no.2:291-293 '63 (MIRA 17:1)

1. Institut gigiyeny truda i professional'nykh zabolevaniy AMN SSSR, Moskva.

YARMONENKO, S.P.; SHMAKOVA, N.L.

Cytological analysis of the action of high-energy protons. Report No.2: Effect of S, B-aminoethylisothiuronium on the destruction, mitosis and chromosome aberrations of the bone marrow of mice subjected to total irradiation by 660 Mev protons. Radiobiologiia 3 no.3:453-455 '63.
(MIRA 17:2)

1. Institut gigiyeny truda i professional'nykh zabolevaniy, Moskva.

ACCESSION NR: AT4042722 S/0000/63/000/000/0510/0514

AUTHOR: Yarmonenko, S. P.; Kurlyandskaya, Z. B.; Avrunina, G. A.; Gaydova, Ye.S.; Govorun, R. D.; Orlyanskaya, R. L.; Paly*ga, G. F.; Ponomareva, V. L.; Fedorova, V. I.; Shmakova, N. L.

TITLE: Reactions to radiation an chemical protection of animals subjected to the effects of high-energy protons

SOURCE: Konferentsiya po aviatsionnoy i kosmicheskoy meditsine, 1963. Aviatsionnaya i kosmicheskaya meditsina (Aviation and space medicine); materialy* konferentsii. Moscow, 1963, 510-514

TOPIC TAGS: corpuscular radiation, high energy proton, synchrocyclotron, gamma ray, radiation effect, radioprotective agent, RBE

ABSTRACT: Experiments were performed to determine the immediate and the delayed effects of high-energy protons and their RBE on animal organisms. High-energy protons of 660 Mev were generated on a syncrocyclotron. Comparative tests using gamma rays from a Co^{60} source were used in establishing the RBE. Nonpure strain mice and rats were used, in addition to mice of the BALB and C-57Bl strains.

Card 1/3 4

ACCESSION NR: AT4042722

All materials were subjected to statistical analysis. In comparative experiments performed on rats subjected to a dose of 500 rad, the degree of injury to hemopoietic organs by protons was considerably less than injury caused by gamma radiation. The depression of hemopoiesis in the bone marrow and the spleens of animals irradiated by protons was less profound and less prolonged, and regenerative processes began earlier than in injuries produced by produced by gamma rays. This difference of effect was particularly clear in the dynamics of the peripheral blood. After exposure to gamma irradiation, a profound and prolonged anemia developed, accompanied by a loss of 44% of the erythrocytes and 51% of the hemoglobin. An equivalent dose of protons caused only insignificant lowering of these indices. Similar effects were observed in the white blood corpuscles, particularly in respect to neutrophiles. The results obtained confirm that the condition of peripheral blood does not reflect the true depth of radiation damage to hemopoiesis. In experiments with white mice, a study was made of early destructive changes in the brain marrow, the dynamics of mitotic activity, and the kinetics of cells with chromosomal injuries. Exposure to protons induced typical radiation degeneration of cells of the bone marrow, a slowing down of mitotic activity, and injuries to the chromosomes. A strong linear relationship of injury-to-dose was

Card 2/5

ACCESSION NR: AT4042722

observed in all three indices within the 250--1000 rad range. Exposure to equivalent doses of gamma rays produced more pronounced changes, indicating that the RBE of protons is equivalent to 0.5--0.7. Preliminary administration of radioprotective agents -- AET (S,β-aminoethylisothioronium), MEA (mercaptoethylamine), and 5-MOT(5-methoxytryptamine) -- diminished the number of degenerating and aberrant cells in the bone marrow in proportion to the effect of the indicated drugs on survival. The most effective appeared to be a combination of MEA and 5-MOT, whose use assured the survival of 50% of the mice when irradiated by doses of 1900 rad. If irradiation is fractionated, the protective effect of the drugs is reduced sharply, or it disappears altogether. In experiments on male mice of the BALB strain subjected to doses of 500 and 700 rad, reversible changes were observed in the weight of testicles. The change of weight and its subsequent recovery was due to the death and the subsequent regeneration of germ cells. Protons have a typical sterilizing effect on the genitalia, but their RBE, in comparison with gamma rays, lies between 0.6 and 0.7. The use of antiradiation drugs did not prevent the sterilizing action of protons, but it caused a somewhat smaller loss of weight of the testicles and produced a shorter period of sterility. White male mice which had been protected by AET, MEA, 5-MOT, and cystamine from the effects of proton doses of 1300--1600 rad recovered their generative functions

Card 3/5

ACCESSION NR: AT4042722

almost completely four to seven months after irradiation. The development of the first generation of 290 mice obtained by crossing the protected and irradiated males with intact females took place without visible somatic injuries. The relative effectiveness of protons and gamma rays in causing somatic mutations was studied on livers of white rats who were subjected to doses of 150 rad. Regeneration of the liver was induced by removing the large left and the front right lobes of the liver. The operation was performed 24 hours after irradiation. The animals were killed 30 hours after the operation, i. e., during the first wave of the increase of mitotic activity. Control animals had 6.9% of aberrant cells, while after irradiation by protons and gamma rays, the number of aberrant cells was 20% and 29%, respectively. This indicates that the RBE of protons in respect to somatic mutations is around 0.7. New data were obtained on the blastomogenic effect of protons. Out of 85 irradiated rats, tumors were found in 39. Twenty-five of them had multiple tumors in various locations. In experiments on non-pure strain white mice, it was possible to show that antiradiation drugs, while increasing the ratio resistance of the animals, do not prevent subsequent development of new growth. Out of 65 irradiated mice who died at various periods after exposure to protons in doses from 1300 to 1500 rad (after having previously received antiradiation protection), fourteen had leucosis and four had sarcoma.

Card 4/5 SUBMITTED: 27SEPT63

L 39686-65 EWG(j)/EWT(m)
ACCESSION NR: AP5010351 UR/0205/65/005/002/0275/0278

16
15
B

AUTHOR: Shmakova, N. L. 19

TITLE: Cytological analysis of the effects of high energy protons. III. Dose dependence and the dynamics of chromosomal aberrations in the bone marrow of mice irradiated with 660-Mev protons and Co^{60} gamma rays

SOURCE: Radiobiologiya, v. 5, no. 2, 1965, 275-278

TOPIC TAGS: gamma radiation, high energy proton, biological effect, cytology, bone marrow, chromosomal aberration, mitosis

ABSTRACT: The authors compared the cytological effects of various doses of 660-Mev protons and Co^{60} rays. White male mice weighing 20—22 g were exposed to single proton doses of 250, 500, 800, and 1000 r. Animals were killed 12, 24, 48, and 96 hr after irradiation. A total of 137 animals including the controls were used. Results are given in Table 1 and 2 of Enclosure. It was concluded that 660-Mev protons inhibit bone-marrow mitosis, as reflected by cells with chromosomal injury such as bridges and acentric fragments. The level of mitotic inhibition and the number of cells with chromosomal aberrations depend linearly on the dose absorbed. The RBE of protons compared to gamma rays was determined to be 0.65. Orig. art. has: 2 figures and 2 tables. [CD]

Card 1/4

L 39686-65
ACCESSION NR: AP5010351

ASSOCIATION: Institut gigiyeny truda i profzabolevaniy AMN SSSR, Moscow (Institute of Industrial Hygiene and Occupational Diseases, AMN SSSR)

SUBMITTED: 03Jun63 ENCL: 02 SUB CODE: LS

NO REF SOV: 007 OTHER: 001 ATD PRESS: 3209

Card 2/4

L 05835-67 EWT(l) SCTB DD/GD

ACC NR: AT6036685 SOURCE CODE: UR/0000/66/000/000/0387/0388

AUTHOR: Shmakova, N. L.; Yarmonenko, S. P. 11

ORG: none

TITLE: Mechanism of injury and shielding of the bone marrow of animals against proton and x ray irradiation /Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24-27 May 1966/

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 387-388

TOPIC TAGS: ionizing radiation biologic effect, proton radiation biologic effect, relative biologic efficiency, hematopoiesis, radiation tissue effect, bone marrow

ABSTRACT:

Experimental data were obtained on the kinetics of radiation injury to bone marrow in mice. Animals were irradiated with x-rays and high-energy protons in doses of 250—700 rem. Interstage death of cells, chromosome aberrations and delayed cell division were evaluated as factors contributing to radiation injury. Quantitative cytological analysis showed that bone marrow destruction in the first few days after irradiation was

Card 1/3

L 08835-67

ACC NR: AT6036685

largely due to delayed cell division, combined with a normal rate of ejection of formed blood elements into the sanguiferous lumen. In the range of lethal and sublethal doses used, bone marrow destruction occurred exponentially, regardless of dependence on dose value of protective agents.

It was found that interstage death and chromosome injuries do not essentially alter the bone-marrow destruction rate, but they do determine the outcome of radiation injury, since they characterize the cellular balance of hemogenic organs and the degree of leukopenia in the period 3—4 days after irradiation. Neutrophil leukocytosis observed immediately after irradiation was caused by the necessity of removal of cellular detritus (formed in large amounts by the mass interstage death of cells).

Radioprotectors work by weakening all types of radiation injury to cells. They have a lesser or negligible effect on the kinetics of initial bone-marrow destruction. The protective effect is manifested by the beginning of regeneration, which is facilitated for protected animals because of the existence of a stock of undamaged hemogenic cells. The number of these undamaged cells with all radiation doses exceeds the number in unprotected control animals by 40%. This is caused by the difference in recovery rate.

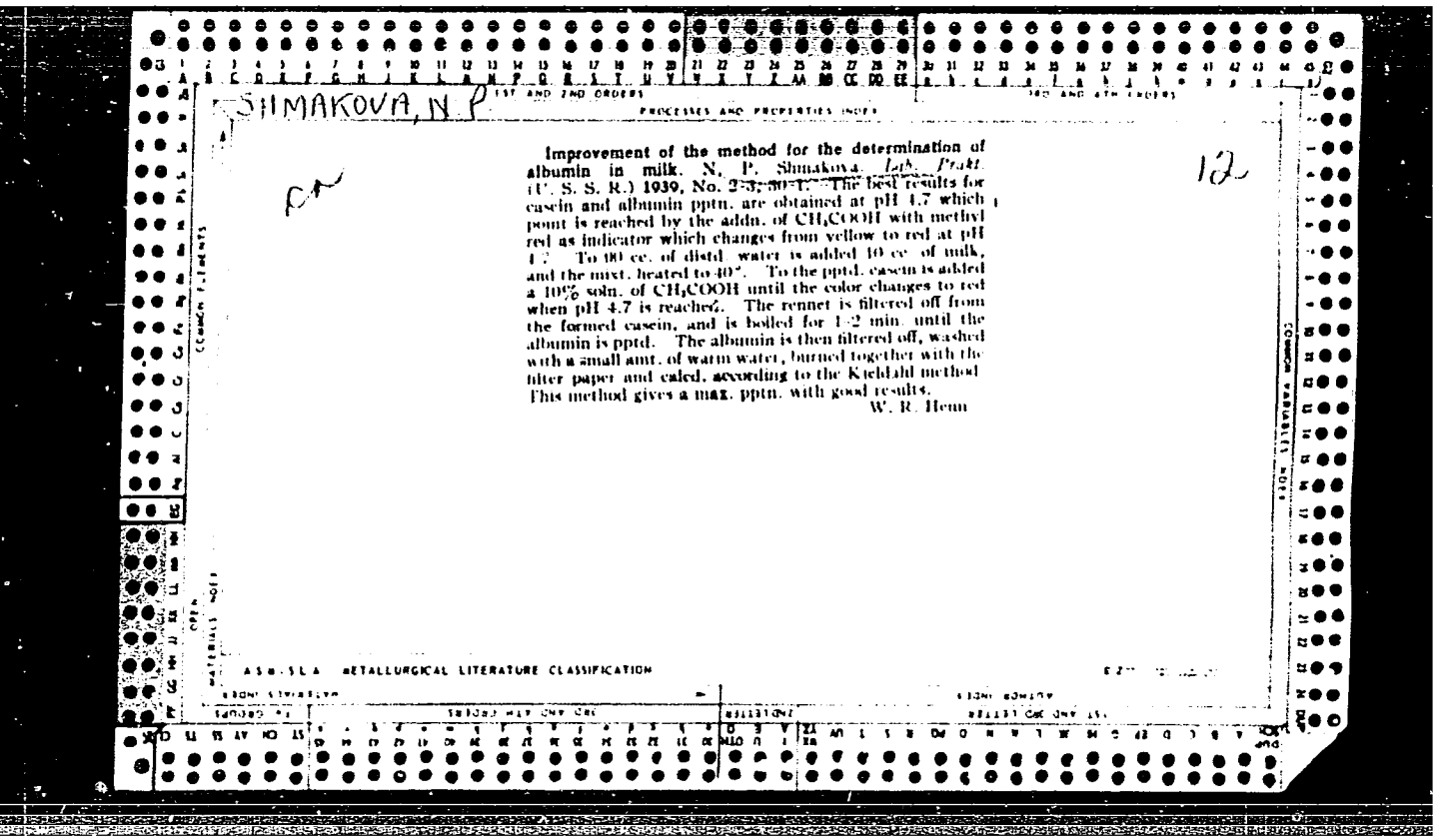
Card 2/3

ACC NR: AT6036685

for mitotic activity and by the difference in quality of mitoses. On the basis of experimental data, methods of search for new radioprotectors and methods of early therapy for acute radiation sickness were discussed. [W. A. No. 22; ATD Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

Card 3/3



SHMAKOVA, N. P.

Improvement of the method for the determination of albumin in milk. N. P. Shmakova. *Lab. Prakt.* (U. S. S. R.) 1939, No. 2-3, 30-1. The best results for casein and albumin pptn. are obtained at pH 4.7 which point is reached by the addn. of CH_3COOH with methyl red as indicator which changes from yellow to red at pH 4.2. To 100 cc. of distd. water is added 10 cc. of milk, and the mixt. heated to 40°. To the pptd. casein is added a 10% soln. of CH_3COOH until the color changes to red when pH 4.7 is reached. The rennet is filtered off from the formed casein, and is boiled for 1-2 min. until the albumin is pptd. The albumin is then filtered off, washed with a small amt. of warm water, burned together with the filter paper and caled. according to the Kjeldahl method. This method gives a max. pptn. with good results.

W. R. Henn

SHMAKOVA, N.P.

Accelerating the maturation of wine by treatment with ozone and ultraviolet rays [in Russian with English summary]. Biokhim.vin. no.1:47-59 '47. (MLRA 7:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut konservnoy promyshlennosti.
(Wine and wine making)

ACCESSION NR: AP3001073 S/0205/63/003/003/0453/0455

AUTHOR: Yarmonenko, S. P.; Shmakova, N. L.

TITLE: Cytological analysis of the effect of high-energy protons: Part 2. Effect of S,Beta-aminoethylisothiuronium (AET) on cell destruction, mitosis, and chromosome aberrations in the bone marrow of mice subjected to total-body irradiation by 660-Mev protons

SOURCE: Radiobiologiya, v. 3, no. 3, 1963, 453-455

TOPIC TAGS: high-energy protons, 660-Mev protons, radioprotective agents, S,Beta-aminoethylisothiuronium, AET, radiogenic cellular degeneration, radiogenic mitotic activity increase, radiogenic chromosome damage

ABSTRACT: Combined effects of 660-Mev protons and AET (S,Beta-aminoethyl-isothiuronium) on bone-marrow cells of white mice were investigated at the Ob"yedinennyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research) by personnel of the Institut gigiyeny truda i profzabolevaniy (Institute of Industrial Hygiene and Occupational Diseases). Administration

Card 1/2

ACCESSION NR: AP3001073

to male mice weighing 20 to 23 g of 3 mg of AET bromide, hydrobromide 5 to 10 min before total-body irradiation with 1000 rad resulted in a significant decrease in the frequency of radiogenic cellular degeneration in bone-marrow cells, an increase in mitotic activity, and a decrease in the number of cells showing radiogenic chromosome damage as compared to irradiated controls which did not receive AET. The beneficial effect of AET on the processes of cell division in the bone marrow indicate that AET is an effective radioprotective agent capable of increasing survival rates following irradiation by high-energy protons. Orig. art. has: 3 tables.

ASSOCIATION: Institut gigiyeny truda i profzabolevaniy, Moscow (Institute of Industrial Hygiene and Occupational Diseases)

SUBMITTED: 06Jun62 DATE ACQ: 01Jul63 ENCL: 00

SUB CODE: 00 NO REF SOV: 006 OTHER: 001

Card 2/2

SOCHEVANOV, V.G.; VOLKOVA, G.A.; VOLKOVA, L.P.; MARTYNOVA, L.T.; PAKHOMOVA, K.S.; POPOVA, T.P.; ROZBIANSKAYA, A.A.; ROZOVSKAYA, G.V.; SHMAKOVA, N.V.; ANISIMKIN, I.F., redaktor izdatel'stva; POPOV, N.D., tekhnicheskiy redaktor

[Methods of chemical analysis of mineral ores; polarography] Metody khimicheskogo analiza mineral'nogo syr'ia; poliarografiia. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr. No. 2. 1956. 99 p. (MLRA 10:4)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya.
(Polarography)

SHMAKOVA, N. V.

SOCHEVANOV, V.G.; SHMAKOVA, N.V.; VOLKOVA, G.A.

Conditions for precipitation of uranyl ferrocyanide in aqueous solutions. Zhur.neorg.khim. 2 no.9:2049-2057 S '57. (MIRA 10:12)
(Precipitation Chemistry)) (Uranyl ferrocyanide)

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 poliarograficheskogo analiza mineral'nogo syr'ia; itogi seminara, 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)

SOCHEVANOV, V.G.; SHMAKOVA, N.V.; MARTYNOVA, L.T.; VOLKOVA, G.A.

Analytical characteristics of the EDE-10 p anionite. Zav. lab. no.4:422-425 '60. (MIRA 13:6)
(Metals--Analysis) (Ion exchange)

5.5210

77753
SOV/75-15-1-15/29

AUTHORS: Sochevanov, V. G., Shmakova, N. V., Volkova, G. A.

TITLE: The Effect of Some Ions on the Precipitation of Uranyl Ferrocyanide From Aqueous Solutions

PERIODICAL: Zhurnal analiticheskoy khimii, 1960, Vol 15, Nr 1, pp 77-83 (USSR)

ABSTRACT: The effect of some ions on the composition of the precipitate formed by the reaction of uranyl ion with ferrocyanide was studied, using amperometric titration. Titration was conducted in I M potassium nitrate solution at pH 3.0—5.0 and 40-60°. According to the effect on uranyl ferrocyanide precipitation, the investigated elements form the following groups. Ions which do not effect the composition of uranyl ferrocyanide: NH_4^+, Na^+, Mg^{2+}, Al^{3+}, Cr^{3+}, Ce^{3+}, VO_3^-, CrO_4^- and Cl^-; ions which change the composition

Card 1/6

The Effect of Some Ions on the Precipitation of Uranyl Ferrocyanide From Aqueous Solutions

77753
SOV/75-15-1-15/29

Table 1. Results of amperometric titration of uranyl and copper solutions with ferrocyanide. (a) Taken (millimole); (b) molar ratio; (c) consumption of $K_4Fe(CN)_6$ (millimole; (d) molar ratio; (e) composition of the salt corresponding to the given ratio.

(a) Cu^{2+}	(a) UO_2^{2+}	(b) Cu^{2+}/UO_2^{2+}	(c)	(d) $(Cu^{2+}+UO_2^{2+})/Fe(CN)_6^{4-}$	(e)
0	0,01	0 : 1	0,0078	1,29	$K_2(UO_2)_2[Fe(CN)_6]$
0,01	0,1	1 : 10	0,0810	1,27	
0,01	0,05	1 : 5	0,0465	1,29	
0,01	0,02	1 : 2	0,0532	1,29	
0,01	0,01	1 : 2	0,0232	1,29	
0,01	0,01	1 : 1	0,0145	1,37	$K_4(Cu,UO_2)_3$ $\cdot[Fe(CN)_6]_2$
0,01	0,01	1 : 1	0,0145	1,37	
0,01	0,01	2 : 1	0,0224	1,34	
0,03	0,01	3 : 1	0,0280	1,37	
0,05	0,01	5 : 1	0,0370	1,63	
0,10	0,01	10 : 1	0,0750	1,47	$K_2(Cu,UO_2)_3$ $\cdot[Fe(CN)_6]_2$
0,15	0,01	15 : 1	0,0860	1,55	
0,06	--	6 : 0	0,0415	1,45	
0,10	--	10 : 0	0,0663	1,51	
0,20	--	20 : 0	0,1280	1,56	$K_2Cu[Fe(CN)_6]_2$
0,30	--	30 : 0	0,1950	1,55	

Card 3/6

The Effect of Some Ions on the Precipitation of Uranyl Ferrocyanide From Aqueous Solutions

77753
SOV/75-15-1-15/29

Table 2. Amperometric titration of uranium in the presence of Al, Cr, and Ce. (a) Taken (millimole); (b) molar ratio; (c) consumption; (d) remarks; (e) is not titrated; (f) the same; (g) titrating curves are distinct; (h) titrating curves are not distinct; (j) titrating curve not quite distinct.

(a)				(b)	(c)	(d)
Al^{3+}	Cr^{3+}	Ce^{3+}	UO_2^{2+}	Me^{3+}/UO_2^{2+}	$K_4[Fe(CN)_6]$, ml	
—	—	—	0,01	0 : 1	0,80	
0,10				1 : 6	(e)	
0,50				5 : 6	(e)	
0,01			0,01	1 : 1	0,90	
0,05	—	—	0,01	5 : 1	0,90	
0,10	—	—	0,01	10 : 1	0,88	(g)
0,30	—	—	0,01	30 : 1	0,90	
0,50	—	—	0,01	50 : 1	0,90	
0,80			0,01	80 : 1	1,00	(i)
1,00	—	—	0,01	100 : 1	1,00	

Card 4/6

Table 4. Amperometric determination of uranium in the presence of vanadate (a) Take VO_3 (millimole); (b) taken ... (millimole); (c) ratio ... (millimole), (d) consumption ... for titration (ml); (e) is not titrated; (f) the same.

(a)	(b) UO_2^{2+}.	(c) $VO_3^- : UO_2^{2+}$.	(d) $K_4Fe(CN)_6$	(a)	(b) UO_2^{2+}.	(c) VO_3^- / UO_2^{2+}.	(d) $K_4Fe(CN)_6$, ml
—	0,010	0 : 1	0,80	0,03	0,010	8 : 1	0,75
0,02	—	2 : 0	(e)	0,08	0,010	8 : 1	0,80
0,08	—	8 : 0	(f)	0,16	0,010	16 : 1	0,85
0,20	—	20 : 0	» »	0,40	0,015	27 : 1	1,27
0,80	—	80 : 0	» »	0,40	0,15	27 : 1	1,25
0,04	0,010	4 : 1	0,80	0,40	0,010	40 : 1	0,85
0,04	0,010	4 : 1	0,80	0,40	0,010	40 : 1	0,90

SOCHEVANOV, V.G.; SHMAKOVA, N.V.; MARTYNOVA, L.T.; VOLKOVA, G.A.

Increased sensitivity of the polarographic determination of uranium in the presence of vanadium and phosphate ions. Zhur. anal.khim.16 no.3:362-363 My-Je '61. (MIRA 14:6)
(Uranium--Analysis)
(Polarography)

SHMAKOVA, P. Ye.: Master Med Sci (diss) -- "Experience in the surgical treatment of chronic osteomyelitis by filling the residual bone cavities with an unfolded Filatov graft". Novosibirsk, 1958. 13 pp (Novosibirsk State Med Inst), 250 copies (KL, No 3, 1959, 139)

SHMAKOVA, S.T., sornyakoved

Unit for the control of the quarantined ragweed Ambrosia artemisiaefolia. Zashch. rast. ot vred. i bol. 9 no.2:46 '64. (MIRA 17:6)

1. Rostovskaya gosudarstvennaya karantinnaya inspektsiya.

LARIONOV, A.K.; ALEKSEYEV, V.M.; LIPSON, G.A.; NEMANOVA, G.F., red. izd-va; SHMAKOVA, T.M., tekhn. red.

[Soil moisture and present methods of determining it]Vlazhnost' gruntov i sovremennye metody ee opredeleniia. Moskva, Gosgeoltekhizdat, 1962. 133 p. (MIRA 15:11)
(Soil moisture)

CA SHMAKOVA, T.S.

24

Preparation of varnish base from dolphin fat. T. S. Shmakova. *Rybnoe Khoz.* 27, No. 7, 54–6(1951).—The body fat of dolphin treated with steam at 280° (with removal of volatile substances, largely lower fatty acids) until rapid increase of viscosity is noted gives 60% by wt. of the polymeric product, which dissolves in turpentine, amyl butyrate, amyl acetate, and $CHCl_3$. The soln. so obtained, mixed with cobalt drier, when coated on metal sheets and dried 6 hrs. gives a good high-quality film with satisfactory mech. properties. Tackiness is absent. G. M. Kosolapoff

SHMAKOVA, V.I.; YUZHAKOVA, N.N.; REZNICHENKO, V.G.; GLEBOV, I.T.; VOLKOV, A.S.; URZLYA, N.Ye.; BEKHTEREV, P.A.; RYS', G.I.; VORONINA, M.N.; GVOZDINTSKIY, I.M.; VARAKSINA, M.P.; MASTERSKIKH, M.A.; GONCHAROVA, V.A.; BICHEVINA, A.N.; SOROKIN, M.A., red.; GRIN', Ye., tekhn.red.

[Economy of Altai Territory during the past 40 years; a statistical manual] Narodnoe khoziaistvo Altaiskogo kraia za 40 let. Sovetskoi vlasti; statisticheskii sbornik. Barnaul, Altaiskoe knizhnoe izd-vo, 1957. 110 p. (MIRA 11:3)

1. Altayskiy kray. Statisticheskoye upravleniye. 2. Statisticheskoye upravleniya Altayskogo kraya (for all except Sorokin, Grin') 1. 3. Nachal'nik Statisticheskogo upravleniya Altayskogo kraya (for Sorokin)
(Altai territory--Statistics)

Shmakova, Ye. G.

L 51475-65 EWP(m)/EPF(c)/EPF(n)-2/EPR/EWT(1)/FCS(k)/EWG(m)/EWA(1) Pd-1/Pr-4/Ps-4/Pu-4/Pi-4 WW

AM5012942 BOOK EXPLOITATION S/ 7/ 55 841

Kutateladze, S. S., ed.

Heat and mass transfer and friction in a turbulent boundary layer (Teplomassoobmen i treniye v turbulentnom pogranichnom sloye) Novosibirsk, Redizdat Sib. otd. AN SSSR, 1964. 206 pl illus., biblio. Errata slip inserted. 1000 copies printed. (At head of title: Akadmeiya nauk SSSR. Sibirskoye otdeleniye. Institut teplofiziki) Editor: L. I. Shpakovskaya; Technical editor: Ye. G. Shmakova; Proofreader: L. I. Korshunova

TOPIC TAGS: boundary layer flow, detached flow, friction, heat transfer, incompressible fluid, mass transfer, nonisothermal flow, radiation effect, turbulent boundary layer

PURPOSE AND COVERAGE: This book is a continuation of the monograph by S. S. Kutateladze and A. I. Leont'yev, published in 1962, in which certain properties of the limiting laws of friction and heat transfer in the turbulent boundary layer on a solid were formulated and specific applications of these laws were analyzed. The basic portion of the book was written by Kutateladze and A. I. Leont'yev.

Card 1/3

AM5012942

N. A. Rubtsov was mainly responsible for the development of problems of the interaction of the turbulent boundary layer with radiation. The theory of the flow structure beyond the region of detachment was developed by M. A. Gol'dshtik. Others who helped prepare the book were N. N. Kirillova, B. P. Mironov, V. A. Mukhin, N. V. Mukhina, A. K. Rebrov, V. K. Fedorov, M. V. Davydova, S. A. Druzhinin, E. P. Volchkov, Ye. M. Khabakhpasheva, I. G. Malenkov, V. N. Moskvicheva, and L. S. Shtokolov. Professor D. B. Spolding helped in the analysis of certain interesting questions.

TABLE OF CONTENTS:

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Card 3/3 MB

VARENTSOV, M.I.; DITMAR, V.I.; LI, A.B.; SHMAKOVA, Ye.I.

Age of rock salt in the diapir structures of the Chu-Sarysu Depression. Dokl. AN SSSR 159 no.2:327-329 N '64. (MIRA 17:12)

1. Institut geologii i razrabotki goryuchikh iskopayemykh.
2. Chlen-korrespondent AN SSSR (for Varentsov).

AL'TSHULER, M.M.; SHMAKOVA, Ye.K., kandidat ekonomicheskikh nauk.

Effectiveness of underground coal gasification in the Moscow Basin.
Podzem.gaz.ugl. no.2:105-110 '57. (MIRA 10:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut Podzemgaz.
(Moscow Basin--Coal gasification, Underground)

SHMAKOVA, Ye.K.

SHMAKOVA, Ye.K., kand.ekon.nauk.

Economic efficiency of using oxygen in underground gasification of coal. Podzem.gaz.ugl. no.4:67-69 '57. (MIRA 11:1)

1.Vsesoyuznyy nauchno-issledovatel'skiy institut Podzemgaz.
(Coal gasification, Underground)

SHMAKOVA, Ye.K., kand. ekon. nauk

Economic efficiency of underground lignite gasification using a flowsheet with thermal treatment of the coal seam. Podzem. gaz. ugl. no.4:70-71 '58. (MIRA 11:12)

1.Vsesoyuznyy nauchno-issledovatel'skiy institut Podzemgaz.
(Coal gasification, Underground--Costs)

SHMAKOVA, Ye.K., kand.ekon.nauk; MIKHAYLOVA, G.N.

Re-evaluating the fixed capital of "Podzemgaz" plants. Podzem. gaz.ugl. no.2:65-66 '59. (MIRA 12:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proyektnyy institut podzemnoy gazifikatsii ugley.
(Coal gasification, Underground--Equipment and supplies)
(Industrial buildings)

SHMAKOVA, Ye.K., kand.ekon.nauk

Basic problems of work organization in the "Podzemgaz" Plant in Lisichansk. Nauch. trudy VNII Podzemgaza no.6:115-124 '62. (MIRA 15:11)

1. Sektor tekhniko-ekonomicheskiy Vsesoyuznogo nauchno-issledovatel'skogo instituta podzemnoy gazifikatsii ugley.
(Donets Basin--Coal gasification, Underground)

SOV/139-58-6-28/29

AUTHOR: Shmakova, Z. A.

TITLE: Investigation of the Infrared Absorption Spectra of Three Nitroaniline Isomers (Issledovaniye infrakrasnykh spektrov pogloshcheniya trekh izomerov nitroanilina v rastvorakh)

PERIODICAL: Izvestiya Vysshikh Uchebnykh Zavedeniy, Fizika, 1958, Nr 6, pp 171-172 (USSR)

ABSTRACT: The paper reports measurements of the infrared absorption spectra of three nitroaniline isomers, of aniline and nitrobenzene in the region 2.5-10 μ. These substances were studied as solutions in dioxane and CCl_4 in order to elucidate the nature of interaction of the atomic groups NH_2 and NO_2 with each other and with the benzene ring. The three nitroaniline isomers were chemically pure and their melting points were 71.0 (ortho), 113.6 (meta) and 146.5°C (para-nitroaniline). The solvents used were also pure and their boiling points were 77.6 (CCl_4) and 101°C (dioxane). The absorption spectra were recorded by means of an infrared spectrometer IKS-11. The solution concentrations were from 0.003 to 1.5 mole/litre and the thickness of the absorbing

Card 1/3

Investigation of the Infrared Absorption Spectra of Three Nitroaniline Isomers

layer was from 0.5 to 0.01 mm. The results are given in Tables 1 and 2. The author compares her own and published data (Refs 1,2,5) and draws the following conclusions:

1. Association between nitroaniline molecules occurs at room temperature. This is indicated by splitting of the 3.09 μ band, which is due to deformational vibrations of the NH_2 group, into two components at 3.14 and 3.24 μ.

2. Changes in the frequencies of the fundamental vibrations of the NO_2 group suggest: (a) existence of intramolecular hydrogen bond in o-nitroaniline dissolved in CCl_4, and (b) association between nitroaniline molecules of the three isomers in CCl_4 solutions. The last conclusion is supported also by splitting of the absorption band in the region of 7 μ due to the symmetrical vibrations of the NO_2 group.

3. Splitting of the 7.35 μ band, due to symmetrical vibrations of the NO_2 group, was observed in solutions of p-nitroaniline in dioxane. This splitting is

Investigation of the Infrared Absorption Spectra of Three Nitroaniline Isomers

probably due to association of p-nitroaniline molecules. This conclusion agrees with Bobovich's data (Ref 4).
4. Displacement of the 6.55 μ band towards longer wavelengths observed in solutions of o- and p-nitroaniline in dioxane is ascribed to the existence of the conjugation effect in these isomers. Acknowledgments are made to V. I. Danilova who directed this work and N.A.Prilezhayeva for her advice.
There are 2 tables and 4 references, 1 of which is Soviet and three English.

(Note: This is an abridged translation)

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosuniversitete imeni V. V. Kuybysheva (Siberian Physico-Technical Institute at Tomsk State University imeni V. V. Kuybyshev)

SUBMITTED: July 19, 1958

SHMAKOVA, Z.A.

Investigation of infrared absorption spectra of nitroaniline isomers in solutions. Izv.vys.ucheb.zav.; fiz. no.6:171-172 '59.
(MIRA 12:4)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosuniversitete im. V.V. Kuybysheva.
(Aniline--Spectra)

S/058/61/000/007/019/086
A001/A101

AUTHORS: Danilova, V.I., Shmakova, Z.A.

TITLE: On the nature of intra- and intermolecular interactions of NO_2, NH_2, and OH-groups in aromatic compounds

PERIODICAL: Referativnyy zhurnal, Fizika, no. 7, 1961, 135, abstract 7V266 ("Dokl. Mezhvuz. nauchn. konferentsii po spektroskopii i spektr. analizu", Tomsk, Tomskiy un-t, 1960, 90 - 91)

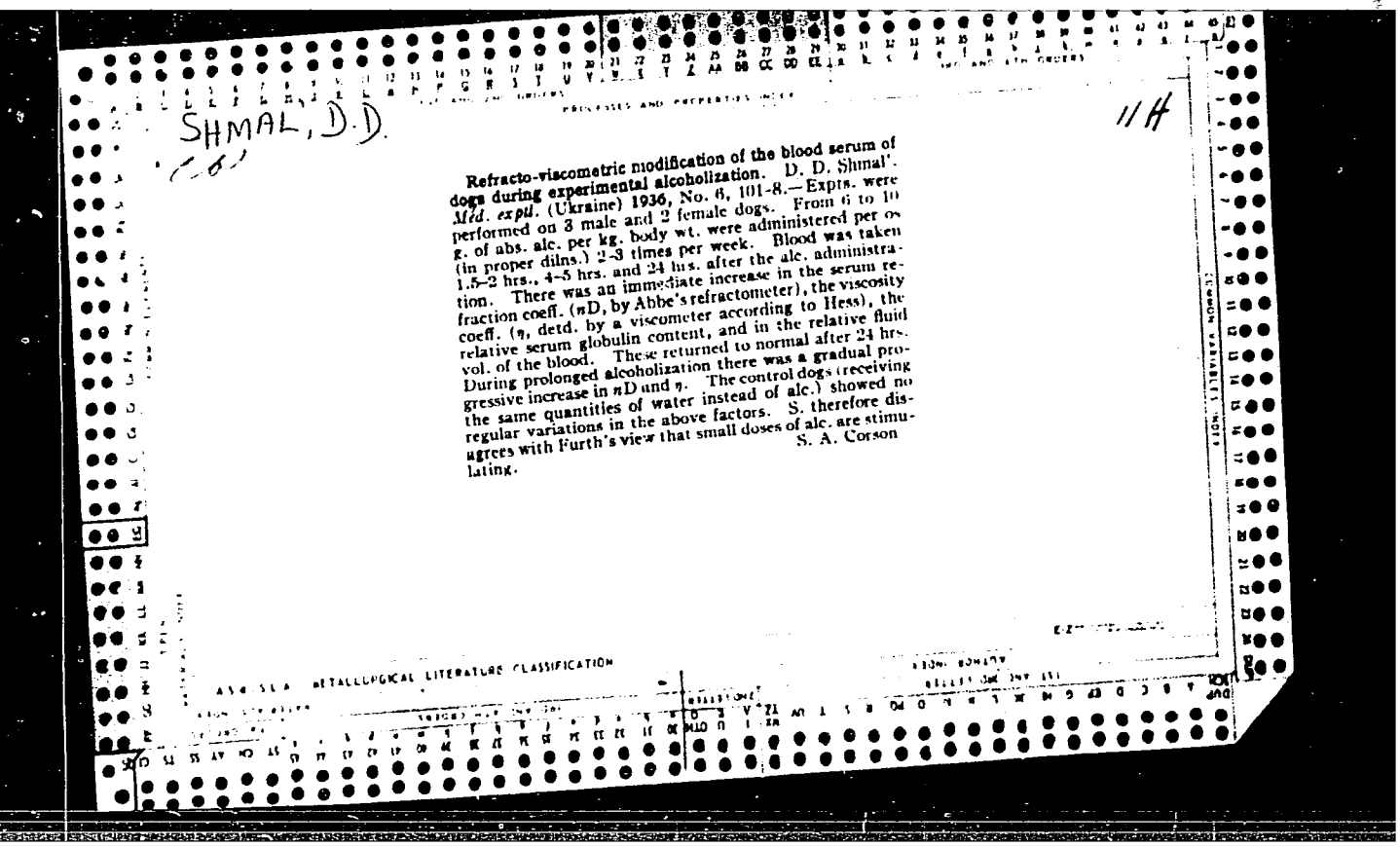
TEXT: Electronic and vibration absorption spectra of solutions of several substituted of benzene containing groups NO_2, NH_2 and OH are compared with Raman spectra of these compounds. It is shown that in view of specific features of the mentioned substituting groups, possessing both donor and acceptor properties, in the investigated molecules and solutions take place very complicated processes of intra- and intermolecular interactions, among which should be singled out the effects of conjugation, hydrogen bonds and associations. Characteristic spectroscopic marks are established indicating the presence, in every particular case, of one or another type of intra- and intermolecular interactions.
[Abstracter's note: Complete translation] N. Bakhshiyev

Card 1/1

DANILOVA, V.I.; SHMAKOVA, Z.A.

Investigation of interaction processes between NO_2, OH, and NH_2 groups in aromatic compounds by the use of infrared absorption spectra. Izv.vys.ucheb.zav.;fiz. 2:91-97 '62. (MIRA 15:7)

1. Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosudarstvennom universitete imeni Kuybysheva.
(Aromatic compounds) (Absorption spectra)



SHMAL, D.D.

11H

Refracto-viscometric modification of the blood serum of dogs during experimental alcoholization. D. D. Shmal'. *Med. exptl.* (Ukraine) **1936**, No. 6, 101-8.—Expts. were performed on 3 male and 2 female dogs. From 6 to 10 g. of abs. alc. per kg. body wt. were administered per os (in proper dilns.) 2–3 times per week. Blood was taken 1.5–2 hrs., 4–5 hrs. and 24 hrs. after the alc. administration. There was an immediate increase in the serum refraction coeff. (nD, by Abbe's refractometer), the viscosity coeff. (η, detd. by a viscometer according to Hess), the relative serum globulin content, and in the relative fluid vol. of the blood. These returned to normal after 24 hrs. During prolonged alcoholization there was a gradual progressive increase in nD and η. The control dogs (receiving the same quantities of water instead of alc.) showed no regular variations in the above factors. S. therefore disagrees with Furth's view that small doses of alc. are stimulating.

S. A. Corson

A V S L A METALLURGICAL LITERATURE CLASSIFICATION

SHMAL', D.D.

New method of differentiation of boiled water from fresh water. Gig. sanit., Moskva no. 1:46 Jan 1953. (CLML 24:2)

1. Of Kiev Line Sanitary-Epidemiological Station of Dneprovsk Water Public Health Department.

SHMAL', D.D.

Caisson bathometer. Gig. i san. no.9:48-49 S '54. (MLRA 7:10)

1.Iz Kiyevskoy lineynoy sanitarno-epidemiologicheskoy stantsii Dneprovskogo vodedravotdela.
(APPARATUS AND INSTRUMENTS, caisson bathometer)

SHMAL', D.D.

New caisson type bathometer. Voen.-med. zhur. no.9:68-69 S '55.
(BATHOMETER) (MLRA 9:9)

SHMAL', D. D.

"A New-Type Batometer: Caisson Batometer," Voyenno-Med. Zhur. p. 68, No. 9, 1955.

SHILL', D.D.

[Minimum health requirements for workers in public eating establishments and the food trade] Sanitarnyi minimum dlia rabotnikov obshchestvennogo pitaniia i torgovli pishchevymi produktami; v voprosakh i otvetakh. Izd. 3-e, ispr. i dop. Kiev, Gos. med.izd-vo USSR, 1957. 105 p. (MIRA 11:4)
(FOOD INDUSTRY--HYGIENIC ASPECTS)

KALYUZHNYY, D.K., prof., otv.red.; GORODETSKIY, A.S., kand.med.nauk, red.; IZDEBSKIY, A.M., kand.med.nauk, red.; KVITNITSKAYA, N.N., kand. med.nauk, red.; KRYZHANOVSKAYA, V.V., kand.med.nauk, red.; MARTYNYUK, V.Z., prof., red.; PETROV, Yu.L., kand.med.nauk, red.; POZNANSKIY, S.S., kand.med.nauk, red.; STOVBUN, A.T., kand.med. nauk, red.; SHMAL', D.D., kand.med.nauk, red.; POTOTSKAYA, L.A., tekhred.

[Hygienic study and improvement of the environment] Gigienicheskoe izuchenie i ozdorovlenie vneshnei sredy. Kiev, Gos.med.izd-vo USSR, 1959. 331 p. (MIRA 13:4)

1. Ukrainskiy nauchno-issledovatel'skiy institut kommunal'noy gigiyeny. 2. Predsedatel' Problemnoy komissii Ministerstva zdravookhraneniya USSR (for Kalyuzhnyy).
(PUBLIC HEALTH)

SHMAL', Dmitriy Dionisovich, dotsent; GORDIN, B.L., red.; LOKHMATYY, Ye.G., tekhred.

[Minimum sanitary requirements for workers in public feeding and the food trade; questions and answers] Sanitarnyi minimum dlia rabotnikov obshchestvennogo pitaniia i torgovli pishchevymi produktami; v voprosakh i otvetakh. Izd.5. Kiev, Gos.med.izd-vo USSR, 1960. 105 p. (MIRA 13:12)
(FOOD HANDLING)

SIMONOVICH, I. [Symonovych, I.], inzh.; SHMAL', D., dots.; LARIONOV, V. arkh.

They said that in earnest, but it was 100 years ago. Znan. ta pratsia no.3:16-17 Mr '60. (MIRA 13:6)
(Cables, Submarine) (Flies as carriers of diseases)

VOL'FSON, Z.G., prof.; KUSHAKOVSKIY, L.N., prof.; BARANNIK, P.I., prof.; MIKHALYUK, I.A., dotsent; SHMAL', D.D., dotsent

"Hygiene textbook" [1st and 2nd editions] by V.A.Pokrovskii. Reviewed by Z.G.Vol'fson and others. Gig. i san. 26 no.11: 102-106 N '61. (MIRA 14:11)
(HYGIENE) (POKROVSKII, V.A.)

SHMAL', D.D.

Content of light aeroions at small variations in altitude. Gig. i san. 26 no.6:104 Je '61. (MIRA 15:5)

1. Iz kafedry obshchey gigiyeny Kiyevskogo meditsinskogo instituta.
(AIR, IONIZED)

BRATUS', V.D., dots., red.; BARCHENKO, I.P., prof., zam. red.; VERZHIKOVSKAYA, N.V., dots., red.; GROMASHEVSKIY, L.V., prof., red.; SHAKHBAZYAN, G.Kh., prof., red.; BARANNIK, P.I., prof., red.; SHMAL', D.D., dots., red.; POZNANSKIY, S.S., dots., red.; KALYUZHNYY, D.N., red.; CHUCHUPAK, V.D., tekhn. red.

[Hygienic norms and the sanitation of the external environment] Gigienicheskie normativy i ozdorovlenie vneshnei sredy; sbornik nauchnykh rabot. Kiev, Gosmedizdat USSR, 1961. 268 p. (MIRA 15:11)

1. Kiev, Medychnyi instytut. 2. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for Gromshevskiy). 3. Chlen-korrespondent Akademii meditsinskikh nauk SSSR (for Shakhbazyan). 4. Direktor Kiyevskogo meditsinskogo instituta (for Bratus'). 5. Kafedra gigiyeny pitaniya Kiyevskogo meditsinskogo instituta im. A.A.Bogomol'tsa (for Barchenko). 6. Kafedra obshchey gigiyeny Kiyevskogo meditsinskogo instituta Kiyevskogo meditsinskogo instituta im. A.A.Bogomol'tsa (for Verzhikovskaya, Shmal').
(PUBLIC HEALTH)

BARANNIK, P.I., red.; BARCHENKO, I.P., red.; GABOVICH, R.D., red.; KAGAN, S.S., red.; KALYUZHNYY, D.N., red.; KRIVOGLAZ, B.A., red.; POZNANSKIY, S.S., red.; SUPONITSKIY, M.Ya., red.; TRAKHTENBERG, I.M., red.; SHAKHBAZYAN, G.Kh., red.; [redacted] D.D., red.; OSETROV, V.I., red.; CHUCHUPAK, V.D., tekhn.red.

[Problems of general and specialized hygiene] Voprosy obshchei i chastnoi gigieny. Kiev, Gosmedizdat USSR, 1963. 308 p. (MIRA 16:10)

1. Ukraine. Ministerstvo zdravookhraneniia.
(PUBLIC HEALTH)

SHMAL', Dmitriy Dionisovich, dots.; BARCHENKO, I.P., red.

[Sanitary minimum for the workers of public eating places and the food product trade; in questions and answers] Sanitarnyi minimum dlia rabotnikov obshchestvennogo pitaniia i torgovli pishchevymi produktami; v voprosakh i otvetakh. 6., perer. i dop. izd. Kiev, Zdorov'ia, 1965. 108 p. (MIRA 18:4)

SHMAL', G. (Kiyev); KRIVOSHEYEV, S. (Kirovogradskaya obl.); RAPCHINSKIY, A. (Dnepropetrovskaya obl.); SIMOROT, Z.; VOL'TMAN, V. (g.Kalyazin, Kalininskoy obl.); KOLGANOV, I., yurist

Replies to our readers. Sov.profsoiuzy 17 no.11:41 Je '61. (MIRA 14:5)

1. Konsul'tant yuridicheskogo sektora Ukrainskogo repulikanskogo soveta profsoyuzov (for Simorot).
(Wage payment systems) (Vacations, Employee)

VASHCHENKO, V.S.; UDOVENKO, I.P.; SHMALIY, I.P.

Interchangeable SVP-3M section in collapsible supports.
Met. i gornorud. prom. no.3:72-74 My-Je '64.
(MIRA 17:10)

SHMAL'GAUZEN, I.A., akademik.

Morphology of the sound-transmitting apparatus of the Caudata [with English summary in insert]. Zool.zhur.35 no.7:1023-1042 Jl '56. (MLRA 9:9)

1.Zoologicheskiy institut Akademii nauk SSSR.
(Urodela) (Ear)

SHMAL'GAUZEN, Ivan Ivanovich DECEASED 1963

1964

Biology

SHMAL'GAUZEN, Ivan Ivanovich, akademik; NIKITINA, O.G., ved. red.

[Origin of terrestrial vertebrates] Proiskhozhdenie nazemnykh pozvonochnykh. Moskva, Nauka, 1964. 270 p. (MIRA 17:9)

SHMALGAUZEN, O. I.

Mbr., Lab Organogenesis, Inst. Evolutionary Morphology im. A. N. Severtsov, Dept. Biol. Sci., Acad. Sci., -1939-47-. Mbr., Borovoye Reserve, Akmolinsk Oblast, Kazakh SSR, -1944-. "Role of the Olfactory Sac in the Development of the Cartilage Capsule of the Olfactory Organ in Urodela," Dok. AN, 23, No. 4, 1939; "Development of Ear Vesicles in the Absence of Medulla Oblongata in Amphibians," ibid., 28, No. 3, 1940; "On Limits of Life at Negative Temperatures," ibid., 44, No. 2, 1944; "Dependence of the Formative Reaction of the Triturus Vulgaris Embryo in Various Development States in Experiments with Implantation of Pieces of Treated Tissues," ibid., 58, No. 8, 1947.

SIMAL'GAUZEN, O. I.

"Role of the Olfactory Sac in the Development of the Cartilage Capsule of the Olfactory Organ in Urodela," Dokl. Ak. Nauk SSSR, 23, No. 4, p. 395-98 (1939)

Lab. of Organogenesis, Inst. of Evol Morph im A. N. Severtsov, AS USSR

SHMAL'GAUZEN, O.I.

"Development of Ear Vesicles in the Absence of Medulla Oblongata in Amphibians," Dokl. Ak. Nauk SSSR, 28, No. 3, p. 277-80, 1940.

Institute of Morphology of Animals im A N SEVERTSOV, AS USSR

SHMAL'GAUZEN, I.I.

"The Relationship of the Formative Reactions of the Embryo Triturus vulgaris to the Stage of Development in Experiments on Implantation of Pieces of Fixated Tissue," Dokl. Ak. Nauk SSSR, 58, No. 8, p 1841-44, 1947.

Lab. of Organogeneis, Inst. of Evol Morph im A. N. SEVERTSOV, AS USSR

SHMAL'GAUZEN, O.I.

"A Comparative Morphological Study of the Early Stages of Development of the Olefactory Rudiments in Amphibians," Dokl, Ak. Nauk SSSR, 74, No. 4, p. 863-65, 1950.

Olga Ivanova*

*SO: Vech Mosk 9 Aug 54 p2

SHMAL'GAUZEN, O.I.

"Localization and Development of the Rudiments of an Organ of Smell in Connection with the Question of its Origin in Vertebrates," Dokl. Ak. Nauk SSSR, 74, No. 5, p. 1045-48, 1950.

SHMAL'GAUZEN, O.I.

"A New Species of Foraminifera From Lake Balpash-Sor (Kazakhstan)", Dokl. Ak. Nauk SSSR, 75, No. 6, p. 869-72, 1950.

SHMAL'GAUZEN, O. I.

Foraminifera--Balpash-Sor, Lake

Foraminifera of the salt water of Lake Balpash-Sor. Trudy Lab. sapr. otl., No. 5, 1951

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

SHMAL'GAUZEN, O.I.

"Conditions for Formation and Differentiation of Hearing Organs in Embrional Development", Dokl. Ak. Nauk SSSR, 76, No. 3, p. 469-71, 1951.

SHMAL'GAUZEN, O.I.

"Development of the Brachial and Rothic Apparatus of the Sturgeion", Dokl. Ak. Nauk SSSR, 8o, No. 4, p. 681-84, 1951.

SHMAL'GAUZEN, O.I.

"The Ecological and Morphological Peculiarities of the Grubs of the 'Lopatonosa' (Pseudoscaphirhynchus)", Dokl. Ak. Nauk SSSR, 85, No. 6, p. 1399-1402, 1952.

Sturgeons

Development of gills and blood vessels of the organs in the sturgeon (Acipenser stellatus). Dokl. AN SSSR 86 No. 1, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

SHMAL'GAUZEN, O.I.

USSR/Medicine - Embryology

Card1/1 Pub. 22 - 52/52

Authors : Shmal'gauzen, O. I.

Title : Development of gills in larvae of Volga River sturgeon

Periodical : Dok. AN SSSR, 100/2, 397-400, Jan 11, 1955

Abstract : Morphological data are given on the development of gills of Volga River sturgeon larvae. Five USSR references (1934-1952). Drawing.

Institution : Academy of Sciences USSR, The A. N. Severtsov, Institute of Animal Morphology

Presented by : Academician E. N. Pavlovskiy, November 5, 1954

SHMAL'GAUZEN, O.I.

USSR/Biology - Embryology

Card 1/1 Pub. 22 - 54/54

Authors : Shmal'gauzeh, O. I.

Title : Development of branchial vessels in Volga sturgeon larvae

Periodical : Dok. AN SSSR 100/3, 605-608, Jan 21, 1955

Abstract : Biological data are presented on the development of branchial vessels in Volga sturgeon larvae. Four references: 2 USSR and 2 German (1901-1955). Drawings.

Institution : Academy of Sciences USSR, The A. N. Severtsov Institute of Animal Morphology

Presented by: Academician E. N. Pavlovskiy, November 5, 1954

Shmal'gauzen O.I.

USSR/ Biology - Embryology

Card 1/1 Pub. 22 - 60/60

Authors : Shmal'gauzen, O. I.

Title : Ecological-morphological characteristics of the branchical apparatus of Volga sturgeon larvae

Periodical : Dok. AN SSSR 100/4. 837-839. Feb 1, 1955

Abstract : Scientific data are given regarding the ecological-morphological characteristics observed in the development of the branchial apparatus of sturgeon larvae. Seven USSR references (1940-1955). Illustrations.

Institution : Academy of Sciences, USSR, The A. N. Severtsov Institute of Animal Morphology

Presented by : Academician N. N. Pavlovskiy, November 5, 1954

SCHMALHAUSEN, O.I.

AUTHOR SCHMALHAUSEN, O.I. 20-1-60/64

TITLE On the Formation of Deficient Organs of Smell in Species of Sturgeons in Their Artificial Breeding.
(Obrazovaniye defektnykh obonyatel'nykh organov u osetrovykh ryb pri ikh iskustvennom razvedenii - Russian)

PERIODICAL Doklady Akademii Nauk SSSR, 1957, Vol 114, Nr 1, pp 216-219 (U.S.S.R.)

ABSTRACT It has been stated several times in relevant scientific paper s that a number of anomalies can be found in the fry of species of sturgeons at their artificial breeding. The paper under review investigates the causes of these deficiencies.Experiments were carried out both in a station for the artificial breeding of fish and in a laboratory. The laboratory experiments concentrated in particular on the reactions of the fry to unfavorable aeration conditions. It was discovered that the percentage of specimens with deficient organs of smell is small. On the other hand,itwas observed that the fry which had been taken from the same fish-pond and which was developed in Chalikov's apparatus,when brought into the river,i.e. into free current, showed a relatively larger number of specimens with deficient organs and this in spite of the higher saturation with oxygen of the water.The cause for this phenomenon was the toxinity of some metal parts of the apparatus(charts 1 and 2). Still other investigations were carried out and led to the conclusion that in specimens which can develop completely freely,i.e. under natural conditions, anomalies are an exception. (4 charts).

Card 1/2

SHMAL'GAUZEN, O.I.

Morphological investigation of olfactory organs in fishes. Trudy Inst. morf. zhiv. no.40:157-187 '62. (MIRA 16:6)

(Nose—Anatomy) (Fishes—Physiology)

SHMAL'GAUZEN, O.I.

Disorders in the development of the olfactory organ in sturgeons under certain conditions of cultivation. Trudy Inst. morf. zhiv. no.40:188-218 '62. (MIRA 16:6)

(Sturgeons) (Nose)

CHIRKOVA, A.F., ROMANOVA, N.P., SHMAL'GAUZEN, V.I.

The epidemiology of alveolar echinococcosis in the tundra zone of European Russia. Med. paraz. i paraz. bol. 27 no.2:150-152 Mr-Ap '58 (MIRA 11:5)

1. Iz Vsesoyuznogo nauchno- issledovatel'skogo instituta zhivotnogo syr'ya i pushniny TSentrosoyuza.
(ECHINOCOCCOSIS, epidemiology
alveolar echinococcosis in Russia (Rus))
(LUNGS, diseases
alveolar echinococcosis, epidemiol. in Russia (Rus))

BUKHOVTSEV, B. B., ORDANOVICH, A. Ye., SIMAL'GAUZEN, V. I.

"Some Methods for Experimental Determination of Statistical Characteristics of Random Signals."

report presented at the All-Union Conference on Statistical Radio Physics, Gor'kiy, 13-18 October 1958. (Izv. vyssh uchev zaved-Radiotekh., vol. 2, No. 1, pp 121-127) COMPLETE card under SIFOROV, V.I.)

SOV/120-59-4-37/50

AUTHORS: Bukhovtsev, B. B., Shmal'gauzen, V. I.

TITLE: A Photographic Method for Studying Random Processes

PERIODICAL: Pribory i tekhnika eksperimenta, 1959, Nr 4, pp 144-145 (USSR)

ABSTRACT: If the random quantity can be represented electrically, then a CRO tube can conveniently be used to determine its probable density. Let a random signal $\xi(t)$ be applied to the X-plates and let $x(t)$ be the corresponding beam deflection. The time during which the beam remains between x and $x + \Delta x$ is proportional to the probability density $W(x)$. If another random signal $\eta(t)$ is applied to the Y-plates then the time during which the beam lies between x, $x + \Delta x$ and y, $y + \Delta y$, is proportional to $W(x, y)$, which is the 2-dimensional distribution of the quantities $\eta(t)$ and $\xi(t)$. If the two signals are independent then $W(x, y) = W(x)W(y)$. It was shown in Ref 1 that if the excitation and decay of the light produced in the phosphor is independent of the number of excitations then the intensity on the screen is given by $I(x, y) = AW(x, y)$. If the intensity is measured at each point on the screen the 2-dimensional distribution is obtained. In the present method

Card 1/2

SOV/120-59-4-37/50

A Photographic Method for Studying Random Processes

the screen brightness is measured photographically and the photographs are scanned with a microphotometer. Typical distributions obtained are shown in Fig 1. There is 1 figure and 1 Soviet reference.

ASSOCIATION: Fizicheskiy fakul'tet MGU (Physics Department, Moscow State University)

SUBMITTED: May 16, 1958.

Card 2/2

05495
SOV/141-2-2-20/22

AUTHOR: Shmal'gauzen, V.I.

TITLE: The Use of an Electrodynamic Instrument in a Correlator

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika, 1959, Vol 2, Nr 2, pp 318 - 320 (USSR)

ABSTRACT: A coil lies in the field of two coils supplied with the signal and a delayed version of it. An auxiliary coil driven by an amplifier is able to restore the deflected coil to its original position. An optical pick-off measures coil position. The inertia of the system and the magnitude of the restoring torque enable the low-pass filter properties of the system to be controlled. The mean-square error in the measurement depends on the ratio of the correlation time T_K of the random process to the effective averaging time of the filter T_u, given by the second equation on p 319. Figure 1 is a diagram of the arrangement. The input amplifiers d are shown in more detail in Figure 2. The pair of function coils are 2, the output coil 1, the compensating coil is 3, 4 is the pick-off mirror.

Cardl/2

31431
S/188/61/000/006/003/007
B108/B138

9.6000(1040,1139)

AUTHORS: Bukhovtsev, B. B., Ordanovich, A. Ye., Shenyavskiy, L. A., Shmal'gauzen, V. I.

TITLE: Measurement of the probability distribution of the instantaneous values of signals by means of amplitude discriminators

PERIODICAL: Moscow Universitet. Vestnik. Seriya III. Fizika, astronomiya, no. 6, 1961, 25 - 31

4

TEXT: The principle of operation and the designs of two-channel and multi-channel amplitude discriminators are presented. Determination of the probability distribution by an amplitude discriminator is based on measuring the time during which the signal in question does not exceed a given level. The discriminator trims the signal to the desired level and delivers a certain impulse for every section of the signal that lies under the set level. Subsequently, the impulses are time-averaged by a separate device. Fig. 3 shows a 16-channel amplitude discriminator with a threshold given by $U_{n+1/2} = \Delta U(n + 1/2)$ where

Card 1/3

Measurement of the probability...

n = -8,-7,....,-1,0,+1,....,+6,+7. The instruments $\Pi P_{-7\frac{1}{2}}$,....., $\Pi P_{7\frac{1}{2}}$ indicate the integral probability distribution if the switches Π_4 are in position (1), and indicate the differential probability distribution if the switches are in position (2). The described device allows determination of the probability distribution at 16 equidistant points that are symmetric about zero. Signals from the frequency range 50 to 10,000 cps may be investigated. The time of averaging may go down to 500 sec. The accuracy is 10%. A similar two-channel amplitude discriminator for the frequency range 0 - 2000 cps is also described. There are 6 figures and 4 Soviet references.

4

ASSOCIATION: Kafedra obshchey fiziki dlya mekhaniko-matematicheskogo f-ta (Department of General Physics for the Mechanical and Mathematical Division)

SUBMITTED: March 15, 1961

Legend to Fig. 3: (A) discriminator, (B) time-averaging device, (C) pre-amplifier, (D) peak detector. (1) int., (2) diff.

Card 2/2

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S/024/62/000/005/009/012
E140/E135

AUTHORS: Stratonovich, R.L., and Shmal'gauzen, V.I. (Moscow)

TITLE: Certain stationary problems of dynamic programming

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye tekhnicheskikh nauk. Energetika i avtomatika, no.5, 1962, 131-139

TEXT: The article considers certain optimal servosystems in the presence of random forces from the point of view of Bellman's dynamic programming. The problem of applying this method to a continuous system or model is considered, where the input can be considered to be an n-dimensional Markov process. The analysis is based on the penalty function as the quality criterion. The risk is defined as the mathematical expectation of the penalty over a certain time interval. In systems with fixed parameters and signal characteristics, the risk will depend only on the duration of the interval and not on the time explicitly. A general expression for the minimum risk is given in symbolic form and it is stated that its solution is difficult except for one-dimensional problems.

Card 1/2

Certain stationary problems of ... S/024/62/000/005/009/012
E140/E135

A servosystem following a random walk is analysed, then a system with delay, and finally a system following a discontinuous Markov process.
There are 4 figures.

SUBMITTED: July 26, 1961

Card 2/2

L 34905-66 EWP(t)/ETI IJP(c) JD
ACC NR: AP6026588 SOURCE CODE: CZ/0034/66/000/002/0093/0097

AUTHOR: Kubat, Bohumil; Smalek, Josef--Shmalek, I.

ORG: Metallurgical Project, Prague (Hutni projekt)

TITLE: Fume removal from electric arc furnaces

SOURCE: Hutnicke listy, no. 2, 1966, 93-97

TOPIC TAGS: arc furnace, gas filter, metallurgic machinery, metallurgic process, gas engineering

ABSTRACT: The basic principles of the problem are described. The methods for the removal of waste gases, the selection of a filtration station for these gases, the temperature and the combustion properties of these gases are discussed. Methods for additional combustion of ingredients of such gases are described; cooling of such gases, and a heat accumulator are discussed. Suitable furnace pressures are evaluated. Differences between the usual Czechoslovak processes, and the technological aspects of foreign processes are discussed. Orig. art. has: 5 figures. [Based on authors' Eng. abstract] [JPRS: 34,779]

SUB CODE: 13, 11 / SUBM DATE: none / ORIG REF: 004 / OTH REF: 004

Card 1/1 UDC: 669.188.2

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1. [illegible], L. YA. : [illegible], L. V. : SHALIY, R. V.

2. USSR (600)

4. Brucellosis in sheep

7. Studying vaccinotherapy of experimental brucellosis in sheep. Nauch. trudy UIEV 18. 1951.

9. Monthly List of Russian Accessions, Library of Congress, March 1953. Unclassified.