"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

MAN'KOVSKAYA, N.K.; UDOVENKO, S.A.; ROMANOVA, L.A.

Composition and properties of vat residues of synthetic fatty acids used as plasticizers of coumarone tiles. Khim.i tekh.topl.i masel 7 no.6:22-26 Je '62. (MIRA 15:7)
(Acids, Fatty) (Plasticizers)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

ROMANOVA, L.A.

Study of the structure formation of a binder based on coumarone-indene resin and vat residues of synthetic aliphatic acids. Sbor. trud. VNIINSM no.4:28-40 '61. (MIRA 15:2)
(Binding materials)
(Floors)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

ROMANOVA, L.A. Prinimali uchastiye: GORBUNOVA, A.A., kand. tekhn. nauk; BEZHENUTSA, kand. tekhn. nauk; FISHMAN, E.A., inzh.; ZAYCHIKOVA, E.A., red. izd-va; BOROVNEV, N.K., tekhn. red.

[Asbestos-resin tiles]Asbestosmolianye plitki. Moskva, Gosstroiizdat, 1962. 138 p. (MIRA 15:9)

(Floors)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

GORKIN, V.Z.; Prinimala uchastiye: ROMANOVA, L.A.

Certain properties of mitochondrial monoamino oxidase of rat liver and brain. Biokhimiia 24 no.5:826-832 S-O '59. (MIRA 13:2)

1. Laboratoriya obmena azotistykh soyedineniy Instituta biologicheskoy i meditsinskoy khimii Akademii meditsinskikh nauk SSSR, Moskva.
(OXIDASES chem.)
(LIVER metab.)
(BRAIN metab.)
(MITOCHONDRIA metab.)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

ROMANOVA, L.A.

Verifying the rule of the direction of cyclone movement near the surface of the earth. Trudy TSIP no.83:45-47 '59. (MIRA 12:5)

(Cyclones)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

BERGER, Gennadiy Semenovich; ROMANOVA, L.A., otv.red.; GALANOVA, V.V., tekhn.red.; PROZOROVSKAYA, V.L., tekhn.red.

[Graphic method for computing preparation processes of coal and other mineral resources] Graficheskie raschety protsessov obogashcheniia uglia i drugikh poleznykh iskopaemykh. Moskva, Ugletekhizdat, 1959. 50 p. (MIRA 12:4)
(Coal preparation) (Ore dressing)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

KHAZAN, G.L.; ROMANOVA, L.D.; RUDENKO, V.F.

Vascular skin reaction to cooling in connection with changes in the micro- and macroclimate. Gig. i san. 25 no.4:19-23 Ap '60. (MIRA 13:8)

1. Iz Ukrainskogo instituta gigyeny truda i professional'nykh zabolevaniy.
(SKIN) (COLD--PHYSIOLOGICAL EFFECT)
(BODY TEMPERATURE--REGULATION)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

ROMANOVA, L.D., aspirant

Comparative characteristics of methods for the determination of the viability of the eggs of some helminths. Trudy Khar. [illegible] inst. no.50:289-292 '62.

Effect of ultraviolet rays on the viability of eggs of [illegible] tapeworms. Ibid.:293-297 (MIRA [illegible])

1. Kafedra epidemiologii (zav. - prof. M.N.Solov'yev) Khar'kovskogo meditsinskogo instituta.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

L 23638-65 EWG(j)/EWT(m)/EPF(c)/EPF(n)-2/EWP(j)/EWA(h)/EWA(1) Pc-4/Pr-4/Peb/
ACCESSION NR: AP5002820 Pu-4 GG/RM S/0191/65/000/001/0008/0012

AUTHOR: Kirpichnikov, P.A.; Romanova, L.D.

TITLE: The effect of ionizing radiation on polypropylene in the presence of various stabilizers

SOURCE: Plasticheskiye massy, no. 1, 1965, 8-12

TOPIC TAGS: polypropylene, polymer stability, ionizing radiation, polymer stabilizer, polypropylene mechanical property, isotactic polypropylene/stabilizer Fosfit P-24

ABSTRACT: The effect of X-ray on the mechanical properties of stabilized and non-stabilized polypropylene was studied, using specimens of powdered isotactic polypropylene either not stabilized or mixed with 1 wt.% (in acetone solution) of 4,4'-dihydroxydiphenylsulfide, 4,4'-thio-bis(2-tert-butyl-5-methylphenol), 4,4'-di-thio-bis (2-tert-butyl-5-methylphenol), aromatic esters of pyrocatecholphosphorous acid, or 2,4,6-tri-tert-butylphenol, before being dried and pelleted; commercial granulated polypropylene stabilized with "Fosfit P-24", the phosphorous acid tri-ester of phenylmethyl-p-hydroxyphenylmethane, was also tested. The tensile strength and relative elongation of both stabilized and non-stabilized samples increased significantly upon irradiation with total doses of 0.1-0.5 m-roentgen, and this increase was markedly higher for

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L 23638-65
ACCESSION NR: AP5002820

stabilized than for non-stabilized specimens with the exception of the commercial sample containing the stabilizer Fosfit P-24. Irradiation did not increase the tensile strength of this sample, its elongation decreased, and the sample deteriorated upon heating after irradiation. Fosfit P-24 obviously promotes the radical decomposition of irradiated polypropylene. The change in polymer properties was also demonstrated by the decrease in the solubility of irradiated stabilized or non-stabilized samples. Orig. art. has: 2 tables and 6 figures.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: MT

NO REF SOV: 012 OTHER: 010

Card 2/2

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

ROMANOVA, L. D.

Cand Med Sci - (diss) "Effect of ultraviolet rays on the eggs of several helminths and cysts of lamblia. (Experimental studies)." Dnepropetrovsk, 1961. 14 pp; (Ministry of Public Health Ukrainian SSR, Dnepropetrovsk State Med Inst); 200 copies; price not given; (KL, 7-61 sup, 261)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

ROMANOVA, L.G.

Morphological changes in the nucleolus during cogenesis in mollusks of the genus Littorina. Sbor. rab. inst. tsit. no.5:23-28 '63. (MIRA 17:2)

1. Laboratoriya morfologii kletki Instituta tsitorlogii AN SSSR.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

ROMANOVA, L. G.

"Behavior of the Nucleolus in the OOgenesis of Some Mollusks." pp. 67

Institute of Cytology AS USSR Laboratory of Cell Morphology

II Nauchnaya Konferentsiya Instituta Tsitologii AN SSSR. Tezisy Dokladov (Second Scientific Conference of the Institute of Cytology of the Academy of Sciences USSR, Abstracts of Reports), Leningrad, 1962 88 pp.

JPRS 20,634

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

MEERSON, F.Z.; KALENINA, N.S.; MALOV, G.A.; SIMONYAN, N.T.; ROMANOVA, L.K.

Effect of actinomycin D on the development of the compensatory hyperfunction of the myocardium, kidney and liver. Acta biol. acad. sci. Hung. 15 no.4:375-382 '65.

1. Laboratory of Physiology and Pathology of the Myocardium (Head: F.Z. Meerson) and Institute of Normal and Pathological Physiology of the Academy of Medical Sciences (Head: V.V. Parin).

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

LIOZNER, L.D.; [illegible], A.A.; [illegible], L.D.; [illegible], G.V.

Regeneration and compensatory hypertrophy of the lungs in tadpoles. Biul. eksp. biol. i med. 55 no.3:87-91 Mr '63. (MIRA 18:2)

1. Iz laboratorii rosta i razvitiya (zav. - prof. L.D. Liozner) Instituta eksperimental'noy biologii (direktor - prof. I.I. Mayskiy) AMN SSSR, Moskva. Submitted May 17, 1962.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

LIOZNER, L.D.; ROMANOVA, L.K.; TIMASHKEVICH, T.N.

Fourth Conference on Problems of Regeneration and Cell Division. Usp. sovr. biol. 59 no.3:487-490 My-Je '65. (MIRA 18:6)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

ROMANOVA, L.K.

Regeneration hypertophy of the lung in rats after unilateral total removal of the left lung and of the diaphragmatic lobe of the right lung. Report No. 1: Changes in the number of the alveolar size and thickness of the interalveolar septa. Biul. eksp. biol. i med. 50 no. 11:100-105 N '60. (MIRA 13:12)

1. Iz laboratorii rosta i razvitiya (zav. - prof. L.D. Liubimov) Instituta eksperimental'noy biologii (dir. - prof. I.N. Mayskiy) AMN SSSR, Moskva.

(LUNGS)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

ROMANOVA, L.K. Cand Med Sci -- "Comparative study of restorative processes in the lungs of amphibians and mammals." Mos, 1961 (Acad Med Sci USSR)

(KL, 4-61, 211)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

LIOZNER, L.D.; ARTEM'YEVA, N.S.; BABAYEVA, A.G.; ROMANOVA, L.K.; RYABININA, Z.A.; SIDOROVA, V.F.; KHARLOVA, G.V.

Level and 24-hour rhythm of mitotic activity in hypophysectomized rats. Biul. eksp. biol. i med. 54 no.8:77-81 Ag '62.
(MIRA 17:11)

1. Iz laboratorii rosta i razvitiya (zav. - prof. L.D. Liozner) Instituta eksperimental'noy biologii (dir. - prof. I.N. Mayskiy) AMN SSSR, Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR N.N. Zhukovym-Verezhnikovym.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

ACCESSION NR: AR5006795 S/0299/65/000/001/M017/M018

B'

SOURCE: Ref. zh. Biologiya. Svodnyy tom, Abs. 1M97

AUTHOR: Romanova, L. K.

TITLE: Restorative processes in the lungs of toads

CITED SOURCE: Sb. Regeneratsiya i kletochn. razmnozh. u zhivotnykh. M., Nauka, 1964, 124-142

TOPIC TAGS: toad, lung, lung removal, regeneration, hypertrophy, compensatory hypertrophy, regenerative hypertrophy

TRANSLATION: In the first series of experiments on toads approximately one half of the right lung was removed; in the second series the left lung was removed; in the third series the left lung and half of the right lung were removed; in the fourth series compensatory hypertrophy was first induced in the right lung by removing the left lung and in 2 mos half of the right lung was resectioned; and in the fifth series the alveolar sections of the right and left lungs were completely removed. In the first series

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ACCESSION NR: AR5006795

the form of the right lung was not restored, tissue did not grow from the wound surface, and regenerative hypertrophy was insignificant. In the second series the right lung was capable of compensatory hypertrophy (the weight of the right lung increased, its walls and interalveolar septa underwent hypertrophy, but within a limited range). After one year the weight of the right lung became practically normal. The author assumes that reversible development of compensatory hypertrophy is possible. In the 3rd and 4th series the right lung was restored by regenerative hypertrophy (in 6 mos the weight of the right lung became normal). In the 5th series lungs of smaller dimensions and a fewer number of alveoles were formed; at the ends and lateral surface of these lungs, ligatures and small sections of scar tissue (regenerative hypertrophy was combined with the shape forming process) were found. N. S.

SUB CODE: LS ENCL: 00

Card 2/2

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

ROMANOVA, L.K.

Restorative processes in the lungs of Bombina bombina. Trudy MOIP. Otd. biol. 11:124-142 '64. (MIRA 18:1)

1. Laboratoriya rosta i razvitiya Instituta eksperimental'noy biologii AMN SSSR.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

ROMANOVA, L.K.

Regenerating potential of a hypertrophied lung in Triturus cristatus. Biul. eksp. biol. i med. 47 no.3:89-94 Mr '59. (MIRA 12:7)

1. Iz laboratorii rosta i razvitiya (zav. - prof. L.D. Liozner) Instituta eksperimental'noy biologii (dir. - prof. I.N. Mayskiy) AMN SSSR, Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR V. N. Chernigovskim.

(LUNGS, physiol.
regen. of hypertrophied lung in triton (Rus))
(REGENERATION,
of hypertrophied lung in triton (Rus))

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

ROMANOVA, L.K.

Reparatory processes in rat lungs following bilateral resection.
Biul. MOIP. Otd. biol. 65 no.5:131 S-O '60. (MIRA 13:12)
(LUNGS) (REGENERATION (BIOLOGY))

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

Romanova, L. K.

ROMANOVA, L.K.

Effect of liver tissue homogenate on the growth of the liver in tadpoles [with summary in English]. Biul.eksp.biol. i med. 43 no.4: 99-101 Ap '57. (MIRA 10:10)

1. Iz laboratorii rosta i razvitiya (zav. - prof. L.D.Liozner) Instituta eksperimental'noy biologii (dir. - prof. I.N.Mayskiy) AMN SSSR, Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR prof. N.N.Zhukovym-Verezhnikovym.

(LIVER, physiol.
growth in tadpoles, eff. of liver tissue homogenate)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

ROMANOVA, L.K.

Changes in the lungs of Triturus cristatus following injury. Biul.MOIP. Otd.biol. 65 no.3:147-148 My-Je '60. (MIRA 13:7)

(LUNGS) (REGENERATION (BIOLOGY))

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

ROMANOVA, L.K. (Pushkinskaya ul.,15/3, kv.11, Moskva, K-9)

Fixation of the rat lung during inhalation through the pulmonary artery. Arkhiv. anat., gist.i embr. 43 no. 9:97-99 S '62. (MIRA 17:9)

1. Laboratoriya rosta i razvitiya (zav. - prof. L.D.Liozner) Instituta eksperimental'noy biologii AMN SSSR.

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PHASE I BOOK EXPLOITATION SOV/4454

Moscow. Universitet. Kafedra atomnogo yadra

Nekotoryye matematicheskiye zadachi neytronnoy fiziki (Some Mathematical Problems in Neutron Physics) [Moscow] Izd-vo Mosk. univ-ta, 1960. 219 p. Errata slip inserted. 5,000 copies printed.

Ed.: M.G. Zaytseva; Tech. Ed.: K.S. Chistyakova.

PURPOSE: This book is intended for nuclear physicists interested in the mathematical theory of neutron physics.

COVERAGE: The collection of 9 articles was written during the period 1951 - 1955 by students of the Nuclear Physics Department of Moscow State University. The articles deal with the theory of kinetic equations of neutron physics. They should not be regarded as theses but as students' theoretical works which may contain new generalizations and examples of computations, some of which may require further proof. The articles are mathematical in nature and, in general, deal with the problem of setting up and working out approximation methods of

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solving kinetic equations. A critical review of the articles is given in the foreword by Ye. Kuznetsov, who supervised the work and who, with the assistance of T.A. Germogenova and M.V. Maslennikov, edited the collection. Tables, figures, and references accompany the articles.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

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S/054/62/000/003/007/010
B101/3186

AUTHORS: Shul'ts, M. M., Peshekhonova, N. V., Romanova, L. M., Andrianov, A. A.

TITLE: Study of the electrode properties of lithium alumino silicate glasses

PERIODICAL: Leningrad. Universitet. Vestnik. Seriya fiziki i khimii, no. 3, 1962, 108 - 115

TEXT: According to the generalized ion exchange theory of the glass electrode developed by B. P. Nikol'skiy (ZhFKh, 27, 5, 1955; DAN SSSR, 140, 641, 1961), the curve E = f(pH) may have steps if the glass contains hydrogen ions with bonds of different strength. This was checked on lithium alumino silicate glasses containing 24, 27, 30, or 33 mole% Li_2O and 0 - 6 mole% Al_2O_3. The curve E versus pH was plotted by measuring the emf of the following elements:
(Pt)H_2 | 3 M LiOH,LiCl | saturated KCl solution, Hg_2Cl_2 | Hg;
Ag | AgCl,0.1 N HCl | glass membrane | 3 M LiOH,LiCl || saturated KCl solution,
Card 1/3

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S/054/62/000/003/007/010
B101/B186

Study of the electrode...

$Hg_2Cl_2|Hg$.

Results: (1) Lithium silicates without admixture of Al_2O_3 have an H^+ function from pH<1 to pH ≈10-11; at higher pH, transition to a Li^+ function occurs. (2) Even an admixture of 0.5 mole% Al_2O_3 inflects the E-versus-pH curve in the acid range; and at a higher Al_2O_3 content this inflexion extends to a horizontal section with a Li^+ function. (3) Glass electrodes with ≥3 mole% Al_2O_3 behave like Li^+ electrodes at pH 3 - 12. (4) This effect of Al_2O_3 decreases with increasing content of Li_2O in the glass; therefore, higher Al_2O_3 admixtures are necessary to obtain a Li^+ function. The measured values were well reproducible both with rising and falling pH. The behavior of lithium alumino silicate electrodes is explained by the formation of lattice points with excessive negative charges during the introduction of trivalent aluminum in the silicate lattice with the coordination number 4; in these lattice points, the hydrogen ions have no longer a covalent but a weaker bond. The following holds: $\varphi = \varphi^0 + 0.5\vartheta\log(a_{H^+} + Ka_{M^+}) - 0.5\vartheta\log[1/(a_{H^+} + \alpha Ka_{M^+}) + \beta_2/a_{H^+} + \alpha_2 Ka_{M^+})]$.

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Card 3/3

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

ROMANOVA, L.M.

Small-angle approximate solution of the equation of radiation transfer and making it precise. Izv.AN SSSR.Ser.geofiz. no.8:1108-1112 Ag '62. (MIRA 15:8)

1. Institut fiziki atmosfery AN SSSR.
(Electromagnetic waves--Scattering)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

ROMANOVA, L.M.

Using the Kellogg method to calculate the radiation intensity deep in a scattering and absorbing medium. Izv. AN SSSR. Ser. geofiz. no.9:1294-1296 S '62. (MIRA 15:8)

1. Institut fiziki atmosfery AN SSSR.
(Electromagnetic waves)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

41538
S/051/62/013/003/010/012
E032/E514

AUTHOR: Romanova, L.M.

TITLE: Solution of the radiation transfer equation in the case of a very non-spherical scattering indicatrix. I

PERIODICAL: Optika i spektroskopiya, v.13, no.3, 1962, 429-435

TEXT: The aim of this work was to investigate the propagation of electromagnetic radiation in turbid media whose scattering function is drawn out in the forward direction. The problem is formulated as follows. A parallel beam of radiation is assumed to fall on the face of a plane layer of the turbid medium with no internal sources. Neglecting polarization effects, the transfer equation is of the form

$$\mu \frac{\partial I}{\partial \tau} + I(\tau,\mu,\varphi) = \lambda \int_0^{2\pi} \int_{-1}^{+1} \gamma(\cos\vartheta) I(\tau,\mu',\varphi') d\varphi' d\mu' \quad (1)$$

where I is the intensity of radiation in the medium, $\mu = \cos\vartheta$, ϑ is the angle between the direction of propagation and the normal to the layer, τ is the optical thickness, φ is the azimuth in the plane parallel to the boundary and $\gamma(\cos\vartheta)$ is the scattering

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function. It is necessary to solve this integral equation subject to the boundary conditions

$$I(0,\mu,\varphi) = S\delta(\mu-\mu_0)\delta(\varphi-\varphi_0), \quad \mu > 0$$
$$I(\tau^*,\mu,\varphi) = i(\mu,\varphi), \quad \mu < 0 \qquad (2)$$

where $\lambda = \sigma/\sigma+\alpha$, σ and α are the volume scattering and absorption coefficients and i is the angular distribution of the radiation at the other surface ($\tau = \tau^*$). The small-angle approximation is then employed with the scattering function expanded into a finite series of Legendre polynomials. The final solution is given in the form of a sum of the small-angle approximation solution and a correction to this approximation. The whole scheme is in a form suitable for numerical calculations. The corrections to the small-angle approximation are obtained by transforming an integro-differential equation into an approximately equivalent set of ordinary differential equations which are solved by the method of finite differences. The final formulas are then applied to the two cases of a) a plane layer with finite optical thickness and b) a semi-infinite plane layer. The results are suitable for direct use with fast computers.

SUBMITTED: July 14, 1961

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5"

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43494
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E032/E314

97300
44950

AUTHOR: Romanova, L.M.

TITLE: Solution of the radiative transfer equation in the case of a very non-spherical scattering function. II

PERIODICAL: Optika i spektroskopiya, v. 13, no. 6, 1962, 819 - 825

TEXT: A method was proposed in a previous paper (Opt. i spektr., 13, 429, 1962) for solving the radiative transfer equation in plane layers of a turbid medium with very non-spherical scattering functions. The method has been used to calculate the space and angular distribution of intensity in thick layers of a turbid medium, using the "Урал-1" ("Ural-1") computer, and some of these numerical results are presented in this paper. It was assumed in the calculations that the scattering centres in the turbid medium were spherical dielectric particles whose scattering functions were highly elongated in the forward direction. The refractive index was taken to be $n = 1.33$ and the parameter $\rho = 2\pi r/\lambda$, where r is the particle radius and λ the wavelength, was taken to be 20 and 10. The scattering

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S/051/63/014/002/013/026
E039/E120

AUTHOR: Romanova, L.M.

TITLE: Radiation field in the plane layers of a turbid medium with highly anisotropic scattering

PERIODICAL: Optika i spektroskopiya, v.14, no.2, 1963, 262-269

TEXT: A description of the angular and spatial distribution of the intensity of radiation in a turbid medium with the indicatrix of the scattering particles strongly extended in a forward direction is given. This is based on earlier work by the author, and does not include polarization effects. The turbulent medium consists of spherical (or near spherical) dielectric particles with a refractive index near unity uniformly dispersed in some continuous medium. The intensity of radiation I in a plane layer of a turbid medium depends on the optical depth τ and the angle of scattering θ. I is given by the function:

$$I(\tau, \theta, \varphi) = I(\tau, \theta) = Ce^{-k\tau} \varphi(\theta)$$

The constant C depends on the boundary conditions, while the

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decay coefficient k and the form of the function $\varphi(\theta)$ depend only on the value of the parameter $\lambda = \sigma/(\sigma + \alpha)$ (σ and α are volume coefficients of scattering and absorption). φ is the azimuthal angle. In the case of a semi-infinite plane layer Lambert's law of reflection is not valid. The case of a plane layer with finite optical depth is also considered and compared with experimental results. τ_{max} is plotted against θ and shows that for all the cases examined, θ_{max} occurs at $\sim 50°$ which is in good agreement with the experimental value. There are 10 figures and 3 tables.

SUBMITTED: February 14, 1962

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GEORGIYEVSKIY, Yu.S.; GORCHAKOV, G.I.; DIANOV-KLOKOV, V.I.; ROMANOVA, L.M.

Interinstitutional scientific conference on the spectral transparency of the atmosphere in the visible and infrared spectral ranges. Izv. AN SSSR. Fiz. atm. i okeana 2 no.1:94-95 Ja '66. (MIRA 19:1)

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L 26068-66 EWT(1)/FCC GW

ACC NR: AP6003449 SOURCE CODE: UR/0362/66/002/001/0094/0095 154 72

AUTHOR: Georgiyevskiy, Yu. S.; Gorchakov, G. I.; Dianov-Klokov, V. I.; Romanova, L.M. B

ORG: none

TITLE: Conference on the spectral transparency of the atmosphere in the visible and infrared regions of the spectrum

SOURCE: AN SSSR. Izvestiya. Fizika atmosfery i okeana, v. 2, no. 1, 1966, 94-95

TOPIC TAGS: atmosphere transparency, light scattering, meteorologic conference, light absorption, IR radiation, atmospheric turbulence, fog, atmospheric humidity, IR spectroscopy, troposphere, electromagnetic field, quantum mechanics, atmospheric cloud, optic property

ABSTRACT: A scientific conference of the Institutes of Higher Education was held in Tomsk from 29 June to 1 July 1965 on problems dealing with the spectral transparency of the atmosphere in the visible and infrared regions. The conference was convened in accordance with a directive of the Ministry of Higher and Intermediate Specialialized Education of the RSFSR, and was organized by the Commission on Radiation of the Academy of Sciences USSR and the Siberian Physicotechnical Institute imeni V. D. Kuznetsov of Tomsk State University. Representatives of 14 different organizations presented some 70 papers on both theoretical and experimental investigations of the spectral transparency of the atmosphere, light propagation

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in a scattering medium, turbulent fluctuations, measuring equipment, and the techniques of measurement.

Following the introductory remarks of the chairman of the organizing committee, K. Ya. Kondrat'yev (Leningrad State University), the following survey reports were read: Chief results of ground- and upper-level spectral investigations of the infrared transparency of the atmosphere up to 13 μ; solution of direct and inverse problems by K. Ya. Kondrat'yev, I. Ya. Badinov, S. D. Andreyev, and D. V. Andreyev (Leningrad State University), and Current state of the art of experimental and theoretical work on the absorption of infrared radiation in the atmosphere by V. V. Zuyev (Siberian Physiootechnical Institute).

A good many of the reports dealt with the molecular absorption of light.

A series of reports by B.S. Neporent, M. S. Kiseleva, Ye. O. Fedorova, M. M. Miroshnikov, and B. N. Batenov examined certain patterns of absorption of IR radiation along different trajectories in the atmosphere in the region of forbidden bands in the case of a continuous spectrum source as well as the results of utilizing these patterns to investigate the vertical profiles of humidity. Related to these investigations was the work of I. Ya. Badinov, S. D. Andreyev, and B. V. Lipatov (Leningrad State University) on the dynamics of the moisture content of layers of the

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atmosphere as derived from spectroscopic observations. Reports by K. Ya. Kondrat'yev, I. Ya. Badinov, S. D. Andreyev, D. V. Andreyev, V. B. Lipatov, Ye. M. Yesipova, G. A. Nikol'skiy, T. A. Kakar'yeva, N. Ye. Ter-Markaryants, and V. F. Zhvalev (Leningrad State University) suggested the use of spectral investigations of IR radiation at different heights to solve some meteorological problems.

A large number of reports dealt with theoretical and experimental investigations of the functions of atmospheric transmittance in the infrared bands of H_2O and CO_2 absorption (V. Ye. Zuyev, S. D. Tvorogov, L. I. Nesmelov, I. I. Ippolitov, Yu. S. Makushin, A. A. Orlov of the Siberian Physicotechnical Institute; B. M. Golubitskiy, S. O. Mirumyants, S. K. Moskalenko, and A. M. Brounshteyn) and the computation of the intensities in the H_2O and CO_2 absorption bands (Yu. S. Makushin, E. V. Luchin of the Siberian Institute and B. M. Golubitskiy.) Yu. S. Georgiyevskiy (Institute of Physics of the Atmosphere) reported on the results of photoelectric measurements of the transparency of the ground layer of the atmosphere in the 0.37—1.14 μ sector with a resolution of 1—2 Å, which the author compares with computations made on the basis of data from the simultaneous determination of the microstructure by direct methods.

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The characteristics of atmospheric absorption of linear radiation of heated gases (H_2O vapors) in the near-infrared region of the spectrum were examined in a report by E. S. Kuznetsova and M. V. Podkladenko. The latter also delivered a paper on the limits of applicability of schematic models of absorption bands in describing experimental results.

Investigations of the absorption by a horizontal atmospheric layer of the radiation of a slightly heated absolutely black radiator were reported by B. P. Kozyrev and A. P. Buznikov (Leningrad Electrical Engineering Institute imeni V. I. Ul'yanov). Ye. P. Barashkov delivered a paper on the change of the spectral composition of long-wave ascending fluxes in the lower layers of the troposphere under the influence of absorption. A theoretical investigation of the influence on the absorption-line profile of strong absorption and a strong electromagnetic field was made by L. I. Nesmelova, S. D. Tvorogov, N. I. Ippolitov, and A. A. Orlov (Siberian Physicotechnical Institute).

Other reports read were: K. P. Vasilevskiy, V. A. Kazbanov, and T. Ye. Derviz, on the results of experimental investigations of the spectrum of CO_2 absorption in the 2.06-μ region and the patterns of distribution of optical cross sections for individual lines of a band; V. I. Dianov-Klokov

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(Institute of Physics of the Atmosphere), on the expected influence of $[O_2]_2$ and $[O_2 - N_2]$ complexes on the transparency of the atmospheric ground layer in the 0.28—0.235-μ region; V. A. Afanas'yev, A. V. Nevskiy, M. A. Katintsev, and V. G. Naberezhnyy, on the design of an installation, based on the principle of heterodyning, to measure the atmospheric attenuation of a laser beam; Yu. S. Georgiyevskiy, V. I. Dianov-Klokov, S. V. Ovchinnikov, and G. D. Turkin (Institute of Physics of the Atmosphere), on the design of instruments to measure the spectral transparency of the atmosphere with automatic compensation for interference caused by atmospheric turbulence.

Many reports were on the problem of light scattering in the atmosphere and the theory of multiple light scattering, including, for example, L. M. Romanov (Institute of Physics of the Atmosphere), on radiation transfer in forbidden bands of absorption; O. I. Smoktiy (Leningrad State University), on computing the sphericity of the atmosphere; G. M. Krekov (Siberian Institute), on computing the intensity of light at small angles in the case of large scattering particles; L. M. Romanov, L. I. Koprov, and M. S. Malkevich (Institute of Physics of the Atmosphere), on the influence of scattering in the atmosphere on spectral transparency; L. G. Borovoy (Tomsk State University), on computing a mean field in a scattering medium on the basis of Maxwell equations. N. P. Kalashnikov and M. I.

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Ryazanov (Moscow Engineering Physics Institute) reported on the use of the quantum mechanical approach to investigate the passage of a narrow beam of light through a scattering medium. A. P. Ivanov (Institute of Physics of the Belorussian Academy of Sciences) reported on the results of an experimental study of a light field in models of strong scattering media. The results of investigating the optical properties of clouds on model media were contained in a report by G. K. Il'ich (Institute of Physics of the Belorussian Academy of Sciences). K. S. Shifrin, A. Ya. Perel'man, and V. G. Bakhtiarov (Main Geophysical Observatory imeni A. I. Voyeykov) described a method of computing the spectra of scattering particles from data on the spectral transparency of the atmosphere and indicated certain crite. ia for selecting spectral intervals. Yu. S. Lyubovtseva (Institute of Physics of the Atmosphere) reported on measurements of light scattering at small angles and on the influence of such scattering on the results of measuring the spectral transparency of the atmosphere. In M. V. Kabanov's (Siberian Institute) work, interference in the case of light scattering at small angles, was investigated. The report of T. P. Toropova (Astrophysical Institute of the Kazakh Academy of Sciences) described a study of the scattering properties of the atmosphere in different spectral regions. G. Sh. Lifshits, V. Ye. Pavlov, and S. N. Milyutin (Astrophysical Institute of the Kazakh Academy of Sciences) used the Ulbricht

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ACC NR: AP6003449

light-measuring sphere to investigate pure-light absorption in aerosols. V. K. Sonchik, V. P. Lopasov, and N. A. Chernyavskaya (Siberian Institute) presented a report on the results of measurements of complex indices of water in the 2 to 20-μ region.

Several reports were presented on investigations of artificial fogs. For example, B. P. Kozyrev and A. V. Mezenov (Leningrad Electrical Engineering Institute) reported on their studies of the attenuation of long-wave radiation in artificial fogs for regions of the spectrum from 0.5 to 200 μ. The report of B. P. Kosheleva (Tomsk State University) compared experimental and computational data on the coefficient of radiation attenuation in artificial fogs in the 0.42—14-μ region. In these experiments a detailed measurement of the parameters of the microstructure of the fog was made simultaneously. The results of experimental and theoretical investigations of strong fluctuations in light propagation in a turbulent atmosphere were reported by V. I. Tatarskiy, A. S. Gurvich, M. Ye. Gracheva (Institute of Physics of the Atmosphere). And, lastly, N. P. Nalimov reported on the effects of atmospheric turbulence on laser communications. [FSB: v.2, no. 3]

SUB CODE: 04, 20 / SUBM DATE: none

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L 25755-66

ACC NR: AP6016387 SOURCE CODE: UR/0300/65/037/005/0778/0786

AUTHOR: Prokhorova, M. I.; Peneva, T. I.; Romanova, L. S.; Tumanova, S. Yu.

ORG: Physiological Institute, Leningrad State University (Fiziologicheskiy institut Leningradskogo gosudarstvennogo universiteta)

TITLE: Gangliosides of the brain

SOURCE: Ukrayins'kyy biokhimichnyy zhurnal, v. 37, no. 5, 1965, 778-786

TOPIC TAGS: rat, brain, chromatography, biochemistry

ABSTRACT: Determination of the gangliosides in the rat brain by the thiobarbiturate method at 10-12 days, 3-4 weeks, one and a half, and 3 months of age indicated that the accumulation of gangliosides in the rat brain is completed at 3-4 weeks of age. The ganglioside content in the brains of adult animals is an average of 0.15%, calculated on the basis of crude weight of the tissue. The brain gangliosides were separated by thin-layer chromatography into eight fractions, with Rf values: 0.05, 0.14, 0.25, 0.33, 0.43, 0.52, 0.67, and 0.71. Disialogangliosides comprise 68% of the brain gangliosides, trisialogangliosides, about 20%, and monosialogangliosides, about 12% of the total. Orig. art. has: 3 figures and 3 tables. [JPRS]

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L 46785-66 EWT(1)/FCC IJP(c) GG/GW/WW

ACC NR: AP6030085 SOURCE CODE: UR/0362/66/002/008/0844/0850

49 46 B

AUTHOR: Romanova, L. M.

ORG: Institute of Physics of the Atmosphere, Academy of Sciences SSSR (Institut fiziki atmosfery, Akademiya nauk SSSR)

TITLE: Path distribution and the dispersion of a light pulse in a plane layer of a homogeneous turbid medium

SOURCE: AN SSSR. Izvestiya. Fizika atmosfery i okeana, v. 2, no. 8, 1966, 844-850

TOPIC TAGS: turbidity, light reflection, light transmission, light scattering, free path, optic thickness

ABSTRACT: The author calculates the different geometric free paths (ranges) traversed by light propagating in a turbid medium, as well as the total light transmitted and reflected by a plane layer of a homogeneous isotropically scattering nonabsorbing medium when an infinite parallel stationary beam of light is incident perpendicularly on the layer. The expression for the change in intensity of the light after covering a given range, derived from both energy and transport considerations, is integrated to obtain an equation for the zero-order spatial moment of the three-dimensional distribution of the light. Solution of this equation makes it possible to estimate the effective scattering volume and therefore the scales of inhomogeneity in natural turbid media at which the approximation by means of a plane infinite layer is permissible. The solution is obtained by a method proposed in an earlier paper by the

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author (Izv. AN SSSR, Fizika atmosfery i okeana v. 1, No. 10, 1965), and it is found that the same distribution describes the resultant optical ranges and the spreading of the optical momentum from an instantaneous source. Numerical results are given for optical layer thicknesses $\tau = \sigma H = 0.5$, 1, 2, and 3 (σ = scattering coefficient, H = layer thickness). The author thanks Z. N. Tarasenkova, K. S. Glazova, and S. A. Rybkina for the calculations. Orig. art. has: 5 figures and 4 formulas. [02]

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

ACC NR: [illegible] SOURCE CODE: UR/0362/65/001/010/1022/1038

AUTHOR: Romanova, L.M.

ORG: Institute of Atmosphere Physics, AN SSSR (Institut fiziki atmosfery)

TITLE: Distribution of photons along the paths in a layer of a homogeneous turbid medium

SOURCE: AN SSSR. Izvestiya. Fizika atmosfery i okeana, v.1. no.10, 1965, 1022-1038

TOPIC TAGS: atmosphere, atmospheric scatter, light scatter, light transmission, turbid medium light transmission

ABSTRACT: The author considers the problem of light scattering in a flat layer of a turbid medium infinitely extended in two dimensions. Let the uniform medium properties be characterized by the dispersion coefficient, σ, the dispersion indicatrix $(1 - 4\pi) \cdot \gamma(\theta)$, where θ - the angle of dispersion; and by a transparency function, $P_{\Delta\nu}(l)$, where l is the geometrical path length traversed by light, for the frequency interval $\Delta\nu$. From previous referenced work of H. Van de Hulst and W.M. Irvine (Scattering in model planetary atmospheres. Mem.Soc. Roy. Sci. Liege 7, 1962) it is known that then the (desired) light intensity $I_{\Delta\nu}$ at a given point of the medium in the direction w can be computed if the function of the photon distribution along the paths l, namely, $\mathcal{J}(l,M,w)$ is known. This can be done by using the integral:

$$I_{\Delta\nu}(M,\omega) = \int_0^\infty \mathcal{J}(l,M,\omega) P_{\Delta\nu}(l)\, dl. \qquad (1)$$

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$\mathcal{J}(1,M,w)$ can be found from the integrodifferential equation of the form (for complete notations refer to the original)

$$\frac{\partial \mathcal{J}}{\partial \lambda} + \mu \frac{\partial \mathcal{J}}{\partial \xi} + \mathcal{J}(\lambda, \xi, \mu, \varphi) = \varkappa \frac{1}{4\pi} \int_0^{2\pi} \int_{-1}^{+1} \gamma(\mu, \mu', \varphi - \varphi') \mathcal{J}(\lambda, \xi, \mu', \varphi') \times \times d\mu' d\varphi' + Q(\lambda, \xi, \mu, \varphi). \quad (2)$$

While this equation had been solved in the referenced literature under various limitations, the author of this paper presents a complete solution of (2), under certain boundary conditions, for the case of $Q = 0$ (that is, in the absence of internal radiation sources, Abstractor). The distribution, $\mathcal{J}(1,M,w)$ is computed taking into account the dispersions of the first and second order, in quadratures, with corrections for the higher orders. Results of computations are given along the paths of the reflected and transmitted light for an example of a layer of an optical dispersion thickness of .5, and the case of normal light incidence upon the boundary, for an isotropic dispersion indicatrix. Orig. art. has 5 figures, 25 formulas.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

ROMANOVA, L.M.

Photon path distribution in a horizontal layer of a homogeneous turbid medium. Izv. AN SSSR. Fiz. atm. i okeana 1 no.10:1022-1038 O '65. (MIRA 18:10)

1. Institut fiziki atmosfery AN SSSR.

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L 2335-66 EWT(1)/EPF(c)/FCC IJP(c) WW/GG/GW

ACCESSION NR: AP5016288 UR/0362/65/001/006/0599/0606

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B

AUTHOR: Romanova, L. M.

44,55

TITLE: Limiting cases of the path-length distribution function of photons emitted from a thick light-scattering medium

21,44,55

SOURCE: AN SSSR. Izvestiya. Fizika atmosfery i okeana, v. 1, no. 6, 1965, 599-606

TOPIC TAGS: light absorption, light scattering, photon, distribution function, free path

12,44,55

ABSTRACT: The author considers the propagation of light in a plane--parallel layer of a homogeneously scattering and absorbing medium. The layer is assumed to be infinite in two dimensions. A method for calculating the light intensity in a given frequency interval is first indicated, and it is then shown that the photon path-length distribution in the case of strongabsorption is determined by the light intensity. The calculation of the photon path-length distribution in

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the scattering medium can also be calculated from the light intensity, as a function of the parameter α/σ (σ and α are the volume absorption and scattering coefficients). It is shown that for path lengths close to the distance from the nearest radiation source the photon range distribution is determined by the light intensity in the case of strong absorption. In the asymptotic case of very long path lengths, the distribution is determined from the light intensity for weak absorption (small σ). The formulas of G. V. Rozenberg (DAN SSSR v. 145, no. 4, 1962) are used to calculate the distribution function for large ranges in the case of reflection and transmission of a parallel beam of radiation by a thick light-scattering layer, for the intensity of the light reflected and transmitted by a thick layer of a turbid medium. By way of an example, the path-length distribution is obtained for the case of reflection from a semi-infinite layer with spherical scattering indicatrix, and with a highly elongated scattering indicatrix. Orig. art. has: 1 figure and 16 formulas.

ASSOCIATION: Institut fiziki atmospherii akademiya nauk SSSR (Institute of Physics of the atmosphere, Academy of Sciences, SSSR)

44,55

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ACCESSION NR: AP5016288

SUBMITTED: 21Oct64 ENCL: 00 SUB CODE: OP

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[illegible], [illegible].

Reflection and transmission of radiation by thick layers of a turbid medium. Determining the parameters in G.V.Rozenberg's formulae. Opt. i spektr. 17 no.2:25 -[illegible] [illegible] (MIRA 17:8)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

ROMANOVA, L.M.; KOPROVA, L.I.; ROZENBERG, G.V., prof., otv. red.

[Actinometry and atmospheric optics; transactions] Aktinometriia i optika atmosfery; trudy. Moskva, Nauka, 1964. 385 p. (MIRA 18:1)

1. Mezhvedomstvennoye soveshchaniye po aktinometrii i optike atmosfery. 5th, Moscow, 1963. 2. Institut fiziki atmosfery AN SSSR, Moskva (for Rozenberg, Koprova).

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

ACCESSION NR: AP4043013 S/0051/64/017/002/0250/0253

AUTHOR: Romanova, L. M.

TITLE: Reflection and transmission of radiation by thick layers of a turbid medium. Determination of the parameters of the formulas of G. V. Rozenberg

SOURCE: Optika i spektroskopiya, v. 17, no. 2, 1964, 250-253

TOPIC TAGS: optical transmission, light reflection, light scattering

ABSTRACT: The approximate calculations of G. V. Rozenberg (DAN SSSR v. 145, 775, 1962) involve certain functions, which describe the angular dependences of the transmission and reflection coefficients and depend on the scattering indicatrix, but cannot be evaluated within the framework of his theory. The author therefore uses the exact solutions of the transport equation to obtain numerical values for some of the parameters in Rozenberg's formulas. The

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turbid medium is assumed to have weak absorption and to be non-radiating. The results are not applicable to thin layers. "The author thanks G. V. Rozenberg, at whose initiative the work was undertaken, and S. A. Ry*bkina for participating in the calculations." Orig. art. has: 4 formulas and 5 tables.

ASSOCIATION: None

SUBMITTED: 12Jul63 ENCL: 00

SUB CODE: OP NR REF SOV: 004 OTHER: 002

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APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5"

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ROZENBERG, G. V.; ROMANOVA, L. M.; FEYGELSON, Ye. M.; SHIFRIN, K. S.

"Optical and radiative cloud properties."

paper presented at the Atmospheric Radiation Symp, Leningrad, 5-12 Aug 64.

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ACC NR: AP6021576 (N) SOURCE CODE: UR/0402/66/000/003/0323/0328

AUTHOR: Romanova, L. N.; Vasil'yeva, I. G.

ORG: State Control Institute for Medical Biological Preparations (Gosudarstvennyy kontrol'nyy institut meditsinskikh biologicheskikh preparatov im. L. A. Tarasevicha)

TITLE: Pathogenesis of allergic complications due to viruses. Role of previous sensitization in the occurrence of postvaccinal complications after antirabic inoculations

SOURCE: Voprosy virusologii, no. 3, 1966, 323-328

TOPIC TAGS: immunology, allergy, virology, vaccine, virus, rabies virus inoculation, human disease, animal disease, disease vector, divaccine, allergen free vaccine, virus purification, pertussis vaccine, pathogenesis, allergic disease

ABSTRACT:
Functional changes were observed in guinea pigs given single injections of antipertussis vaccine, BCG vaccine, normal bovine serum, PDT, APDT, and typhoid-paratyphoid B divaccine. Such sensitized animals developed pareses and paralyses more often than nonsensitized animals. "Allergen-free" vaccines did not reduce the percentage of diseased animals, and sensitized animals given antirabies-vaccine components never showed clinical

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symptoms. The allergenic effect of pertussis vaccine lasts for six weeks with a peak of sensitization occurring two to three weeks after injection. [W.A. 50; GBE No. 10]

Orig. art. has: 2 tables.

SUB CODE: 06/ SUBM DATE: 16Jun64/ ORIG REF: 019/ OTH REF: 009/

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

ROMANOVA, L.N., otv. za vypusk

[Suburban timetables: Moscow-Klin- Zavidovo; Klin- Kalinin; Klin - Vysokovskaya; Kalinin - Vasil'evskiy Mokh; Kalinin - Bologoye, Oktiabr'-skaia Railroad; summer 1961] Raspisanie dvizheniia prigorodnykh poezdov: Moskva - Klin - Zavidovo; Klin - Kalinin; Klin - Vysokovskaia; Kalinin - Vasil'evskii Mokh; Kalinin - Bologoe, Oktiabr'skoi zh.d.; leto 1961 g. Moskva, Transzheldorizdat, 1961. 55 p. (MIRA 14:7)
(Moscow--Railroads--Timetable)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

GRAYEVSKAYA, N.A.; ROMANOVA, L.N.; BELYAYEV, A.L.

Comparative study of methods for producing type-specific and polyvalent diagnostic poliomyelitis sera. Vop. virus. 6 no.5:620-623 S-O '61. (MIRA 15:1)

1. Institut poliomiyelita i virusnykh entsefalitov AMN SSSR, Moskva.
(POLIOMYELITIS immunol.)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

ROMANOVA, L.N., KRAVCHENKO, A.T., VASIL'YEV, A.G.

Pathogenesis of allergic complications induced by viruses. Report No.1: Development of infection in mice following repeated injection of sublethal doses of the fixed rabies virus. Vop. virus. 10 no.4:430-435 Jl-Ag '65. (MIRA 18:8)

1. Gosudarstvennyy kontrol'nyy institut meditsinskikh biologicheskikh preparatov imeni L.A. Tarasevicha, Moskva.

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SHUYKIN, N.I.; ERIVANSKAYA, L.A.; YAN AY-SI [Yang Ai-hsi]; ROMANOVA, L.P.

Catalytic dehydrocyclization of 2-n-oxtylnaphthalene. Izv.AN SSSR.Ser.khim. no.8:1469-1474 Ag '63. (MIRA 16:9)

1. Moskovskiy gosudarstvennyy universitet im. Lomonosova.
(Naphthalene) (Cyclization)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

ROMANOVA, L.P.

Experiments in growing the annual lupine in forest-steppe areas of Siberia. Uch. zap. TGPI 20:3-14 '61. (MIRA 15:7)
(Siberia--Lupine)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

USSR/Soil Science - Organic Fertilizers. J

Abs Jour : Ref Zhur Biol., No 22, 1958, 100098

Author : Romanova, L.P.

Inst : Tomsk University

Title : Harvest of the Green Mass of Annual Lupine Under the Conditions of Tomskiy Rayon.

Orig Pub : Tr. Tomskogo un-ta, 1957, 140, 171-177

Abstract : In experiments, conducted by the Tomsk Pedagogical Institute and the Tomsk Zonal Station, the brands Benyakon No 3 and Early Rose-colored No 645 were used. Sowing with the application of nitrogen and without it, was conducted in the meddle of May at a depth of 2 cm and a sowing standard of 2 c/ha. Lupine has been sown in spring without fertilization or in autumn by the application of PK in the spring plowing. The calculation of

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USSR/Soil Science - Organic Fertilizers. J

Abs Jour : Ref Zhur Biol., No 22, 1958, 100098

the raw mass was accomplished in the phases of efflorescence and in the blue beans. The largest lupine harvest was obtained in the background of PK. The tubercles on lupine roots were developed at the expense of the local flora; however, nitrification in a considerable degree stimulated their development. During sowing in the Middle of May, lupine accumulated a large quantity of the green mass already in the first half of summer. This made it possible to plow it in at the end of July and use it under the winter rye. In the author's opinion, however, greater results may be expected by using lupine under autumn cultivations, because, under these circumstances, the green mass may be plowed in during autumn. The largest harvest of the green mass was achieved by using the brands No 645 and the Early Rose-colored. It is best of all to use molecular nitrogen No 645 and No 1403. According to all indications, the greatest

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USSR/Soil Science - Organic Fertilizers. J

Abs Jour : Ref Zhur Biol., No 22, 1958, 100098

effectiveness may be expected by using verdant fertilization of the brand No 645. -- Ye.F. Linnik

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

ROMANOVA, L. P.

ROMANOVA, L. P.- "On the Cultivation of Lupine under Conditions of the Tomsk Oblast." Tomsk State U imeni V. V. Kuybyshev, Tomsk, 1955 (Dissertations For the Degree of Candidate of Biological Sciences)

SO: Knizhnaya Letopis' No. 26, June 1955, Moscow

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

J

USSR / Soil Science. Organic Fertilizers.

Abs Jour: Ref Zhur-Biol., No 21, 1958, 95769.

Author : Romanova, L. P.
Inst : Tomsk State Pedagogical Institute.
Title : Biological Bases of Raising Narrowleaved Lupine From Seed in Tomsk Rayon.

Orig Pub: Uch. zap. Tomsk. gos. ped. in-t, 1957, 16, 389-427.

Abstract: By tests conducted in 1952-1954 in Tomsk rayon, it was established that vernalization decreases the growth and weight, and consequently, also the harvest of lupine; but, by accelerating its ripening by 12-23 days, it eliminates the possibility of the death of the plants from spring frosts. Early and extremely-early sowing periods have the same influence (vernalization in natural conditions), since the sprouts do not perish from

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J

USSR / Soil Science. Organic Fertilizers.

Abs Jour: Ref Zhur-Biol., No 21, 1958, 95769.

Abstract: frosts (up to 7-8°), in contrast to immature legumes. It is still better to combine early sowing with vernalization. Inoculation with nitrogen increases the growth absolute weight of seeds, accumulation of total N and content of protein in the seeds, not retarding ripening. Lupine raised in Siberia gave a high harvest of high quantity (absolute weight of seeds and content of protein). A sparse grass-stand is an effective control of fusariosis. In a variety test, the best variety isolated for harvest capacity of seeds and green mass and accumulation of N was lupine 645. -- B. D. Aleglan.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001445230007-5

ROMANOVA, L. P.

29816

Uluchshit' podgotovku spyetsialistov. Pchyelovodstvo, 1949, No. 9, S. 9.

SO: LETOPIS' NO.40

SALAMATOV, M. N.

Razvitiye sadovodstva I pchyel-ovodstva V Kolkhozakh I sovkhozakh Novosibirskoy oblasti.- sm. 29767

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Romanova, L.P.

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