PALITSYA, G. F., PETROVA, N. I.

Comparative evaluation of the biological properties of the Leningrad and Moscow strains of a fixed rabies virus. Trudy Irk. NIIEM no. 6:129-133 '61. (MIRA 17:7)

1. Iz antirabicheskoy laboratorii Irkutskogo nauchno-issledovatel'skogo instituta epidemiologii i mikrobiologii.

POZDNOVA, Ye.N.; PETROVA, N.D.

Immunization of horses with a biostimulant author's abstract. Trudy Irk. NIIEM no. 6:105-106 '61.

Determination of the immunogenic capacity of serums produced by the alexin titer; author's abstract. Ibid.:107-108

Selection of horses for serum production; author's abstract. Ibid.:83-84 (MIRA 17:7)

1. Iz aerobnogo otdela Irkutskogo nauchno-issledovatel'skogo instituta epidemiologii i mikrobiologii.

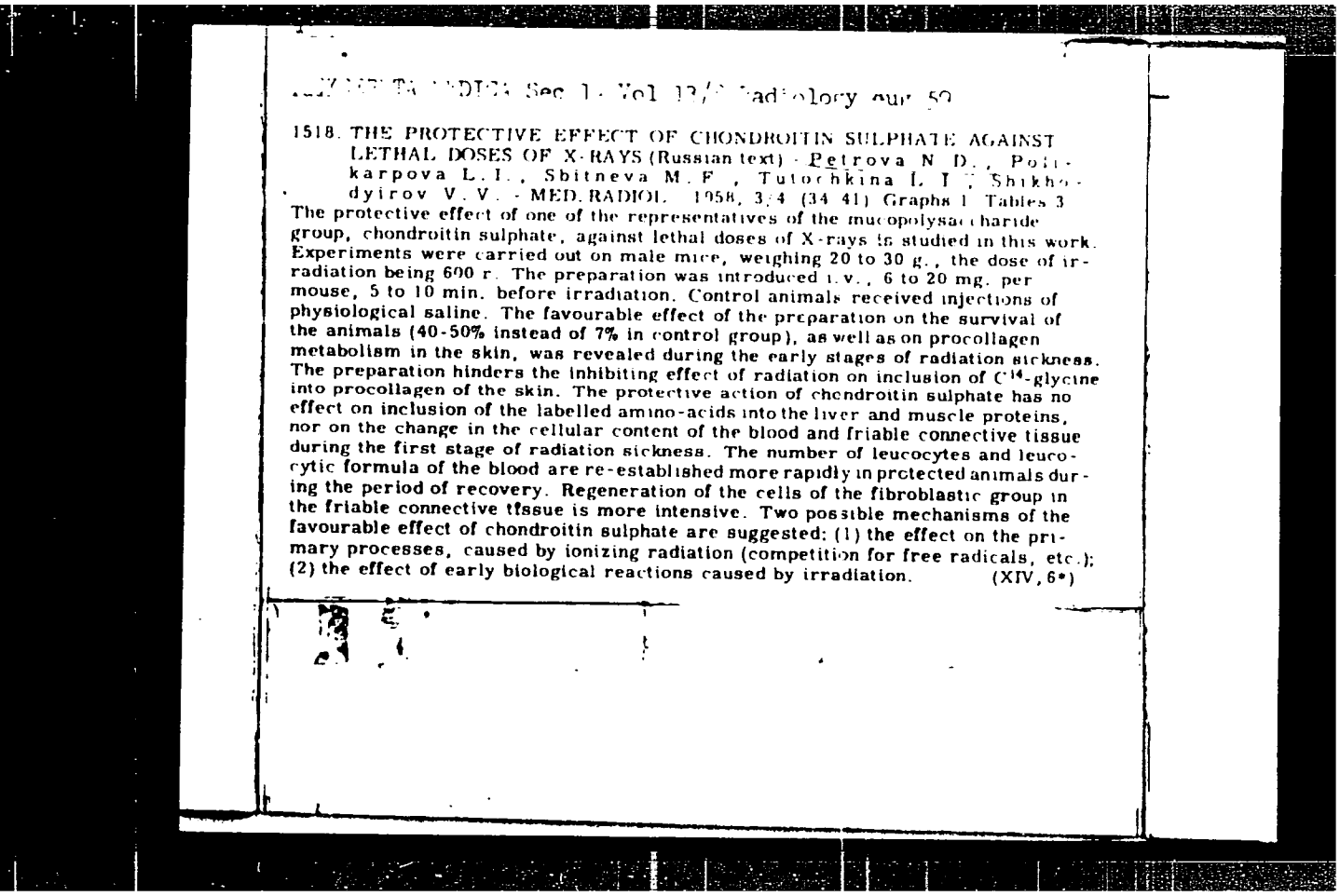
PETROVA, N.D.

Immunizing reactivity in the administration of small doses of antigens; author's abstract. Trudy Irk. NIIEM no. 6:61-62 '61.

Effect of nonspecific stimuli on the immunogenesis in experimental rabies; author's abstract. Ibid.:134 (MIRA 17:7)

1. Iz antirabicheskoy laboratorii Irkutskogo nauchno-issledovatel'skogo instituta epidemiologii i mikrobiologii.

[redacted]



...Sec 1. Vol 13/5 Radiology Aug 59

1518. THE PROTECTIVE EFFECT OF CHONDROITIN SULPHATE AGAINST LETHAL DOSES OF X-RAYS (Russian text) - Petrova N. D., Polikarpova L. I., Sbitneva M. F., Tutochkina L. I., Shikhodyirov V. V. - MED. RADIOL. 1958, 3, 4 (34-41) Graphs 1 Tables 3

The protective effect of one of the representatives of the mucopolysaccharide group, chondroitin sulphate, against lethal doses of X-rays is studied in this work. Experiments were carried out on male mice, weighing 20 to 30 g., the dose of irradiation being 600 r. The preparation was introduced i.v., 6 to 20 mg. per mouse, 5 to 10 min. before irradiation. Control animals received injections of physiological saline. The favourable effect of the preparation on the survival of the animals (40-50% instead of 7% in control group), as well as on procollagen metabolism in the skin, was revealed during the early stages of radiation sickness. The preparation hinders the inhibiting effect of radiation on inclusion of C^{14}-glycine into procollagen of the skin. The protective action of chondroitin sulphate has no effect on inclusion of the labelled amino-acids into the liver and muscle proteins, nor on the change in the cellular content of the blood and friable connective tissue during the first stage of radiation sickness. The number of leucocytes and leucocytic formula of the blood are re-established more rapidly in protected animals during the period of recovery. Regeneration of the cells of the fibroblastic group in the friable connective tissue is more intensive. Two possible mechanisms of the favourable effect of chondroitin sulphate are suggested: (1) the effect on the primary processes, caused by ionizing radiation (competition for free radicals, etc.); (2) the effect of early biological reactions caused by irradiation. (XIV, 6*)

[redacted]

EXCERPTA MEDICA Sec 14 Vol 7/11 Cancer Nov-Dec 58

4651. **The protective effect of chondroitin sulphate against lethal doses of X-rays (Russian text)** PETROVA N. D., POLIKARPOVA L. I., SBITNEVA M. F., TUTOCHKINA L. I., SHIKHODYIROV V. V. *Med. Radiol. (Mosk.)* 1958, 3.4 (34-41) Graphs 1 Tables 3

The protective effect of one of the representatives of the mucopolysaccharide group, chondroitin sulphate, against lethal doses of X-rays is studied in this work. Experiments were carried out on male mice, weighing 20 to 30 g., the dose of irradiation being 600 r. The preparation was introduced i.v., 6 to 20 mg. per mouse, 5 to 10 min. before irradiation. Control animals received injections of physiological saline. The favourable effect of the preparation on the survival of the animals (40-50% instead of 70% in control group), as well as on procollagen metabolism in the skin, was revealed during the early stages of radiation sickness. The preparation hinders the inhibiting effect of radiation on inclusion of C^{14}-glycine into procollagen of the skin. The protective action of chondroitin sulphate has no effect on inclusion of the labelled amino-acids into the liver and muscle proteins, nor on the change in the cellular content of the blood and friable connective tissue during the first stage of radiation sickness. The number of leucocytes and leucocytic formula of the blood are re-established more rapidly in protected animals during the period of recovery. Regeneration of the cells of the fibroblastic group in the friable connective tissue is more intensive. Two possible mechanisms of the favourable effect of chondroitin sulphate are suggested: (1) the effect on the primary processes, caused by ionizing radiation (competition for free radicals, etc.); (2) the effect on early biological reactions caused by irradiation.

PETROVA, N.D.; POLIKARPOVA, L.I.; SBITNEVA, M.F.; TUTOCHKINA, L.T.; SHIKHODYROV, V.V.

Protective effect of chondroitinsulfate in lethal-dose x-irradiation [with summary in English]. Med.rad. 3 no.4:34-41 Jl-Ag '58. (MIRA 12:3)

(CHONDROITIN SULFATE, effects,
in x-ray lethal-dose irradiated animals (Rus))
(ROENTGEN RAYS, effects,
lethal-dose, eff. of chondroitin sulfate in animals (Rus))

L 22782-66 EWT(1)/T JK

ACC NR: AP6007764 SOURCE CODE: UR/0205/66/006/001/0101/0104

H4
H3
B

AUTHOR: Petrova, N. D.; Shal'nov, M. I.

ORG: none

TITLE: Investigation of the radiation protection effect of DNA, RNA, RNA hydrolysate and orotic acid on leukopoiesis in rabbits and rats

SOURCE: Radiobiologiya, v. 6, no. 1, 1966, 101-104

TOPIC TAGS: radiation protection, leukopenia, leukopoiesis, DNA, RNA, radiation sickness, radiation damage

ABSTRACT: The effect of DNA, RNA, RNA hydrolysate and orotic acid--administered before and after irradiation--on leukopoiesis during radiation sickness in rabbits and rats is discussed. The control and experimental rabbits were given a single dose of 550 rad; the rats were exposed to three doses: 100, 200, and 400 rad. Blood was extracted for analysis 1, 3, 7, 12, and 20 days following irradiation. The number of leukocytes in 5 ml of peripheral blood in irradiated experimental and control animals was tallied and compared. Changes in the number of leukocytes in the peripheral blood of the rabbits and rats are graphed. It is concluded that nucleinic preparations are of greater therapeutic than prophylactic benefit; while they do almost nothing to halt leukopenia, they have a beneficial effect on the restoration of leukopoiesis. It is

UDC: 577.391 : 628.58

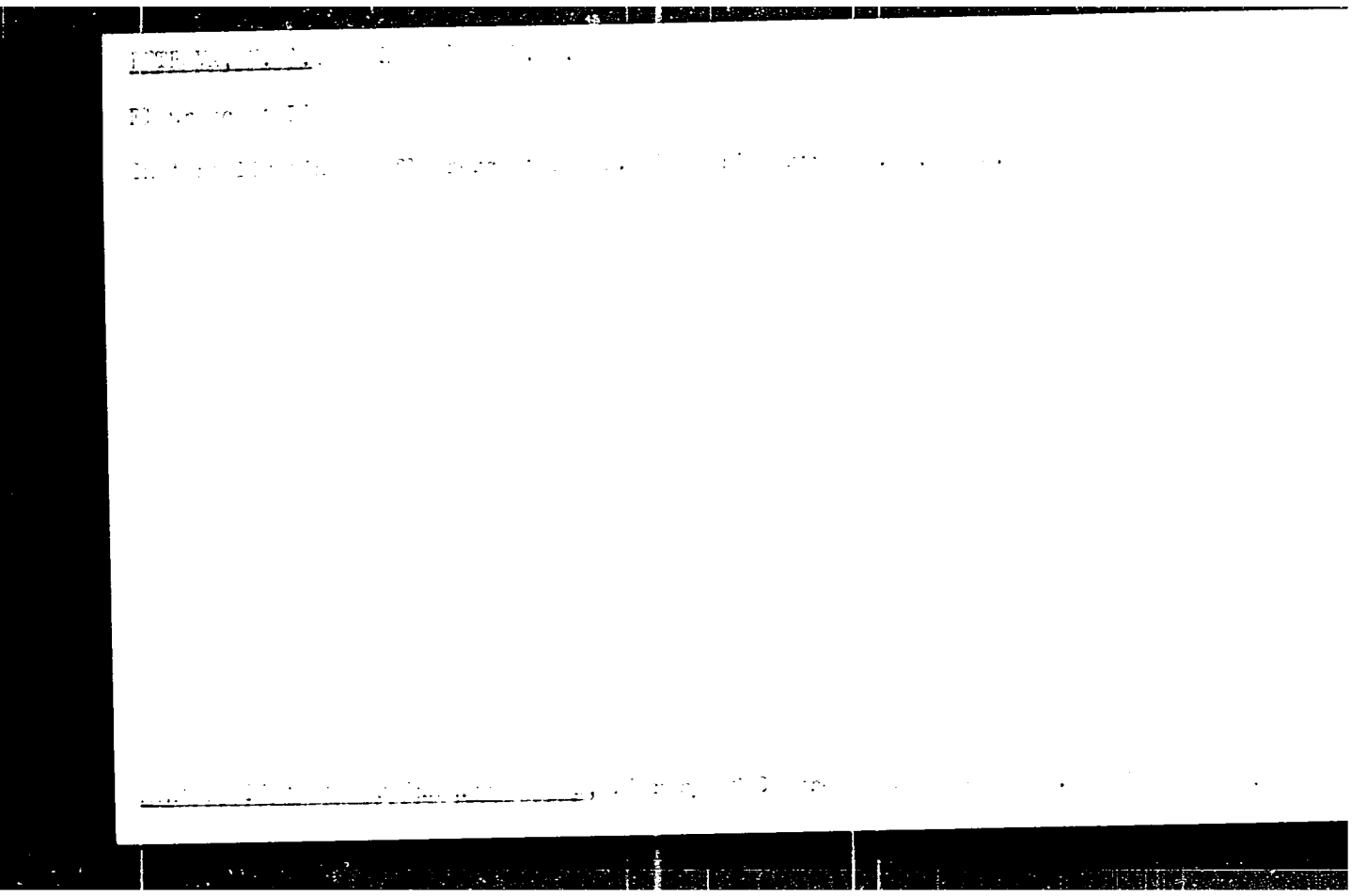
Card 1/2

L 22782-66
ACC NR: AP6007764

recommended that nucleinic preparations be tested for their therapeutic effect on irradiated organisms injected with radiation protection agents which form complexes with DNA. The authors thank Professor I. I. Ivanov at whose initiative the present work was carried out. Orig. art. has: 2 figures.

SUB CODE: 06/ SUBM DATE: 29Jun64/ ORIG REF: 005/ OTH REF: 005 [14]
ATD PRESS: 4229

Card 2/2dla



1. DOLGOPOLOV, V. I., Eng.: PETROVA, N. G.: POZHALKINA, L. N.

2. USSR (600)

4. Electric Lamps, Incandescent

7. Luminescent Lamps with cold cathodes.
Elektrichestvo No. 10, 1952.

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

PETROVA, N.O., inzhener.

Effect of moisture on the lighting of luminescent lamps. Elektrichestvo no.9:83-84 S '53. (MLRA 6:9)
(Fluorescent lamps)

PETROVA, L.D., inzhener.

Device for determining aberrations in lens diffusers. Svetotekhnika 3 no.7:19-22 Jl '57. (MIRA 10:8)

1.Vsesoyuznyy svetotekhnicheskiy institut.
(Lenses)

L 10269-67 EWT(1) GW
ACC NR: AP7003095

KRAYNOV, S. R., RUBEYKIN, V. Z., KAPRANOV, S. D., KOLOTOV, B. A., [illegible] N. G., and KISELEVA, All-Union Scientific Research Institute of Hydrogeology and Engineering Geology, Moscow (Vsesoyuznyy nauchno-issledovatel'skiy gidrogeologii i inzhenernoy geologii)

"Some Peculiarities of Beryllium Geochemistry in Underground Waters"

Moscow, Geokhimiya, No 7, Jul 66, pp 846-853
TOPIC TAGS: underground water, geochemistry, beryllium compound

ABSTRACT: On the basis of beryllium distribution study in various types of underground waters (subsoil, carbonated) it has been established that the beryllium may be rather widely spread in these waters. Maximum beryllium contents are established in subsoil aureole waters of pneumatolytic deposits as well as noncarbonated waters of crystalline rocks. The main forms of beryllium migration in underground waters are the oxide and fluorine-and-carbonate-beryllates.

G. A. Volkov and A. K. Lisitsyn served as consultants in determining the forms of beryllium migration in water. Orig. art. has: 6 figures and 5 tables. [JPRS: 37,428]

SUB CODE: 08, 07 / SUBM DATE: 29Jul65 / ORIG REF: 011 / OTH REF: 005

Card 1/1 6/2

UDC: 550.42:546.45-551.49

0985 2016

DOLGOPOLOV, V.I., inzh.; DOLGOPOLOVA, L.N., inzh.; PETROVA, N.G., inzh.

Principal characteristics of materials used in manufacturing light fixtures. Svetotekhnika 9 no.11:18-22 N '63.
(MIRA 16:12)

1. Vsesoyuznyy svetotekhnicheskiy institut.

DOLGOPOLOV, V.I., inzh.; DOLGOPOLOVA, L.N., inzh.; PETROVA, N.G., inzh.; BELOGLOVSKAYA, T.I., inzh.

Electroluminescent mimic flowsheets and signal registers for control boards. Elek. sta. 34 no.7:72-73 Jl '63. (MIRA 16:8)

69859

3.1540

SOV/35-59-9-7128

Translation from: Referativnyy zhurnal, Astronomiya i Geodeziya, 1959, Nr 9, p 42 (USSR)

AUTHORS: LuYan, Molchanov, A.P., Petrova, N.G., Skripov, F.I.

TITLE: The Observation of an Annular Eclipse of the Sun on April 19, 1958, at the 4.5 cm Wavelength

PERIODICAL: Solnechnyye dannyye, 1958 (1959), Nr 8, pp 70 - 72

ABSTRACT: There is a citation of the photometric curve of the eclipse and the results of its analysis. The local source connected with the group of spots Nr 188 which were observed on the disk the day of the eclipse, produced an increase in the emission by approximately 14% in comparison with the emission from the quiet Sun. The area of the source, if one is to judge by the moments of its being covered by the eclipse and uncovered again, is near to the area of the visible group. The brightness temperature related to this area amounts to $\sim 1.9 \cdot 10^6$ degree K. Two possible explanations are put forward as to the origin of another local source discovered from the anomaly of the shape of the curve, and which is not related to the visible groups of spots. In one of the explanations the source is connected to an active region located at a height of $0.08\ R_\odot < h < 0.25\ R_\odot$ ($R_\odot$ is

Card 1/2

69859
SOV/35-59-9-7128

The Observation of an Annular Eclipse of the Sun on April 19, 1958, at the 4.3 cm Wavelength

the radius of the photosphere) above a group of spots occurring on the day of the eclipse behind the disk. In another explanation, suggested by N.S. Soboleva and V.N Ikhsanova, the local source is connected with the Nr. 147 group of spots, existent in the preceding rotation of the Sun; in the place of this group on the day of the eclipse, an enhanced brightness of the coronal line at λ 5303 was observed. The processing of the ascending part of the eclipse curve in the vicinity of the maximum phase has shown the presence of a bright limb contributing $\sim 6\%$ to the total amount of the radio emission. With the width of the limb being 0.06 R_o its brightness must exceed the mean radio brightness of the sun by 60%.

A.Ye. Salomonovich

Card 2/2

Translation from: Referativnyy zhurnal, [illegible] Nauka, [illegible] SSSR.

AUTHORS: Makover, B.G., Rozhkovskiy, D.A., Matyagin, V.S.

TITLE: Observations of the 195[illegible] Rapeella Parad Comet at the M[illegible] Observatory of the Astrophysics Institute A[illegible] Kazakhstan. SSR (Alma-A[illegible]

PERIODICAL: Astron. tsirkulyar. 1958. [illegible] No 193, pp 2 - 3

ABSTRACT: The authors cite the first 13 [illegible] ations of the comet, determined [illegible] photographs, taken during September - October 195[illegible], with the reflector [illegible] of the mountain astrophysics observatory in Alma-Ata. The [illegible] were measured in the GAISh on Bamberg's measuring apparatus and the [illegible] were processed by the Schlesinger method of relationships.

I.A.M

Card 1/1

KRAYNOV, S.R.; PETROVA, N.G.

Trace elements in mineral waters of the Pamirs. Geokhimiia no.4: 356-366 '62. (MIRA 16:7)

1. All-Union Scientific Research Institute of Hydrogeology and Geological Engineering, Moscow.
(Pamirs—Mineral waters) (Trace elements)

DOLOGOPOLOV, V.I., inzh; DOLOGOPOLAV, L.N., inzh; PETROVA, N.G., inzh; MILYAYEVA, T.I., inzh.

Electroluminescent panels. Svetotekhnika 8 no.11:24-26 N '62. (MIRA 15:10)

1. Vsesoyuznyy svetotekhnicheskiy institut.
(Luminiescence) (Electric apparatus and appliances)

69859

SOV/35-59-9-7128

3.1540

Translation from: Referativnyy zhurnal, Astronomiya i Geodeziya, 1959, Nr 9, p 42 (USSR)

AUTHORS: LuYan, Molchanov, A.P., Petrova, N.G., Skripov, F.I.

TITLE: The Observation of an Annular Eclipse of the Sun on April 19, 1958, at the 4.5 cm Wavelength

PERIODICAL: Solnechnyye dannyye, 1958 (1959), Nr 8, pp 70 - 72

ABSTRACT: There is a citation of the photometric curve of the eclipse and the results of its analysis. The local source connected with the group of spots Nr 188 which were observed on the disk the day of the eclipse, produced an increase in the emission by approximately 14% in comparison with the emission from the quiet Sun. The area of the source, if one is to judge by the moments of its being oovered by the eclipse and uncovered again, is near to the area of the visible group. The brightness temperature related to this area amounts to $\sim 1.9 \cdot 10^6$ degree K. Two possible explanations are put forward as to the origin of another local source discovered from the anomaly of the shape of the curve, and which is not related to the visible groups of spots. In one of the explanations the source is connected to an active region located at a height of $0.08\ R_o < h < 0.25\ R_o$ (R_o is

Card 1/2

69859

The Observation of an Annular Eclipse of the Sun on April 19, 1958, at the [illegible]
Wavelength

the radius of the photosphere) above a group of spots occurring on the day of the eclipse behind the disk. In another explanation, suggested by N.S. Soboleva and V.N. Ikhsanova, the local source is connected with the Nr. 147 group of spots, existent in the preceding rotation of the Sun; in the place of this group on the day of the eclipse, an enhanced brightness of the coronal line at λ 5303 was observed. The processing of the [illegible] the eclipse curve in the vicinity of the maximum phase has shown the presence of a weight limb contributing $\sim$6% to the total amount of the radio emission. With the width of the limb being 0.06 R_o its brightness must exceed the mean radic brightness of the [illegible] by 60%.

A.Ye. Salomonovich

Card 2/2

S/169/62/000/007/131/149
D228/D307

AUTHORS: Molchanov, A. P. and Petrova, N. G.

TITLE: Results of observations of the solar eclipse of 15 February 1961 on the wave 4.5 cm

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 7, 1962, 8-9, abstract 7G55 (Solnechnyye dannyye, no. 12, 1961 (1962), 55-57)

[Abstracter's note: Complete translation.]

Card 1/1

DOLGOPOLOV, V.I.; PETROVA, N.G.

Organic lamp glass. Standartizatsiia 25 no.12 49-50 D '61.
(MIRA 14:11)

(Glass--Standards)

DOLGOPOLOV, V.I., inzh.; PETROVA, N.G., inzh.

Concerning the state standard for organic glass used in lighting engineering. Svetotekhnika 7 no.10:20-24 O '61. (MIRA 14:9)

1. Vsesoyuznyy svetotekhnicheskiy institut.
(Glass--Standards) (Electric lamps)

[illegible]
D[illegible]1/D[illegible]4

AUTHORS Dolgopolov V. I. and Petrova, N. G.

TITLE: Organic glass for illumination purposes

PERIODICAL Standartizatsiya, no. 12, 1961, 4 - 9[illegible]

TEXT: The new GOST (GOST) 97[illegible]-61 for organic glass used for technical illumination is described. It covers the following marks: colorless (SN), colored (SO), reinforced by glass fiber colorless (SAN), reinforced with glass fibers and colored (SAO), with inclusion of glass fibers colored (SVN), and with inclusion of glass fibers colored (SVO). All types will be produced in three classes of heat resistance, and will be designated accordingly. The above GOST envisages six groups of diffusion indices. It is expedient to divide the curves of dispersion into four parts related to four groups of glass. The limit of diffusion and the coefficient of transparence are standardized for five groups of glass [illegible]

Card 1/2

Organic glass for ...

and thicknesses, with ... is concerned. The ... standard also defines ... rating minima of ... slightly colored ... be decided by ... glass must be ... of a 3 mm thick ... improve the ... between the ... is tabulated. ... properties of ... affirmed that ... would reduce ... illumination ... the service ... Cart ...

SAVINYKH, A.G.; PETROVA, N.G.

Vacuum cooling of neutralized solution. Gidroliz. i lesokhim. prom. 11 no.3:17-19 '58. (MIRA 11:5)

1. Khakasskiy gidroliznyy zavod
(Hydrolysis) (Cooling)

GOLOSOVSKAYA, M.A.; PETROVA, N.G.; SKLYAR, I.B.

Clinical aspects and morphology of Ollier's disease (Mafuchi syndrome). Ortop.,travm. i protez. 18 no.1:65-66 Ja-F '57. (MLRA 10:6)

1. Iz kliniko-morfologicheskoy laboratorii (zav. - prof. P.P. Dvizhkov) TSentral'nogo nauchno-issledovatel'skogo instituta protezirovaniya i protezostroyeniya (dir. - prof. B.P.Popov)

(DYSCHONDROPLASIA, case rep.
Ollier's dis., clin. aspects & pathol.)

L'VOV, B.K.; [illegible], N.I.

Anomalies arising from granitoids in the eastern slope of the Southern Urals. Min. i geokhim. no.1:42-44 '64. (MIRA 18:1)

BORISOVA, V.D. Prinimali uchastiye: BATURINA, Ye.A.; PESHKOVA, F.G.; ALENTOV, Ye.P.; LEVUSHKINA, V.Ye.; PETROVA, N.I.; SABLINA, O.F.; SLYADNEV, A.P.; TEVEROVSKAYA, Kh.A.; CHIZHIKOVA, N.M. SHPAKOVSKAYA, L.I., red.; POTOTSKAYA, N.M., tekhn.red.

[Districts of Novosibirsk Province; physicogeographical features] Raiony Novosibirskoi oblasti; prirodno-ekonomicheskaia kharakteristika. Novosibirsk, Novosibirskoe knizhnoe izd-vo, 1959. 367 p. (MIRA 13:9)

(Novosibirsk Province--Economic geography)

PETROVA, N.I., inzh.; ARONINA, Yu.N., kand. tekhn. nauk, dotsent

Changes of the physicomechanical properties of the hair cover of rabbit skins during chemical processing. Nauch. trudy MTILP no.24:60-65 '62. (MIRA 16:7)

1. Kafedra tekhnologii kozhi i mekha Moskovskogo tekhnologicheskogo instituta legkoy promyshlennosti.
(Fur—Testing)

PETROVA, N.I.

Year's life cycle of narcissus in the Central Urals. Nauch.
trudy AKKH no.24 [illegible]101-108 '64 (MIRA 18:[illegible])

VOLKOVA, O.B.; KAZANSKIY, V.I.; VOLKOV, Yu.M.; Prinimali uchastiye KUTYAKOVA, G.N.; PETROVA, N.I.

Obtaining surfactants from low-boiling fractions of light paraffin. Nefteper. i neftekhim. no.7:22-26 '64. (MIRA 17:11)

1. Kuybyshevskiy nauchno-issledovatel'skiy institut neftyanoy promyshlennosti i Vsesoyuznyy nauchno-issledovatel'skiy i proyektnyy institut sinteticheskikh zhirozameniteley.

KHAYKIN, M.S.; PETROVA, N.L.; KUKHTIN, V.A.

Chlorination of dihydroxycoumarins. Zhur.ob.khim. 33 no.12:3941-3943 D '63. (MIRA 17:3)

1. Kazanskiy filial Vsesoyuznogo nauchno-issledovatel'skogo kinofotoinstituta.

PETROVA, Nina

Guidelines for the improvement of labor standardization in textile industry. Trud tseni 5 no. 7:10-21 '63.

KUDRYAVTSEVA, N.G.; PELIPOVA, N.K.

[illegible] more attention to the problems of material incentives in the transfer to the system of defectless production. Kozh.-obuv. prom. 7 no.12:6-9 D '65. (MIR 19:1)

PETROVA, N.K., akusher-ginekolog (Voronezh)

Ways of further improvement of obstetrical and gynecological care in the rural districts of Voronezh Province. Fel'd. i akush. 28 no.5:10-14 My '63. (MIRA 16:7)
(VORONEZH PROVINCE--MEDICINE, RURAL)
(VORONEZH PROVINCE--OBSTETRICS)
(VORONEZH PROVINCE--GYNECOLOGY)

PETROV, N.K.

BUGROVA, V.I., kand. med. nauk; VINOGRADOVA, I.N., kand.biol. nauk; D'YAKOV, S.I., kand. med. nauk; ZHDANOV, V.M., prof.; ZHUKOV-VEREZHNIKOV, N.N., prof.; ZEMTSOVA, O.M., kand. med. nauk; IMSHENETSKIY, A.A., prof.; KALINA, G.P., prof.; KAULEN, D.R., kand. med. nauk; KOVALEVA, A.I., doktor med. nauk; KRASIL'NIKOV, N.A., prof.; KUDLAY, D.G., doktor biol. nauk; LEBEDEVA, M.N., prof.; PERETS, L.G., prof. [deceased]; PEKHOV, A.P., doktor biol. nauk; PLANEL'YES, Kh.Kh., prof.; POGLAZOVA, M.N., kand. biol. nauk; PROZOROV, A.A.; SINITSKIY, A.A., prof.; FEDOROV, M.V., prof. [deceased]; SHANINA-VAGINA, V.I., kand.biol. nauk; VYGODCHIKOV, G.V., prof., zamestitel' otv. red.; ADO, A.D., prof., red.; BAROYAN, O.A., prof., red.; BILIBIN, A.F., prof., red.; BOLDYREV, T.Ye., prof., red.; VASHKOV, V.I., doktor med. nauk, red.; VYAZOV, O.Ye., doktor med. nauk, red.; GAUZE, G.F., prof., red.; GOSTEV, V.S., prof., red.; GORIZONTOV, P.D., prof., red.; GRINBAUM, F.T., prof., red. [deceased]; GROMASHEVSKIY, L.V., prof., red.; YELKIN, I.I., prof., red.; ZASUKHIN, L.N., doktor biol. nauk, red.; ZDRODOVSKIY, P.F., prof., red.; KAPICHNIKOV, M.M., kand. med. nauk, red.; KLEMPARSKAYA, N.N., prof., red.; KOSYAKOV, P.N., prof., red.; LOZOVSKAYA, Ye.S., kand. med. nauk, red.; MAYSKIY, I.N., prof., red.; MUROMTSEV, S.N., prof., red. [deceased];

(Continued on next card)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240530003-3"

BUGROVA, V.I.---(continued) Card 2.
NIKITIN, M.Ya., red.; NIKOLAYEVA, T.A., red.; PAVLOVSKIY, Ye.N., akademik, red.; PASTUKHOV, A.P., kand. med. nauk, red.; PETRISHCHEVA, P.A., prof., red.; POKROVSKAYA, M.P., prof., red.; POPOV, I.S., kand. med. nauk, red.; ROGOZIN, I.I., prof. red.; RUDNEV, G.P., prof., red.; SERGIYEV, P.G., prof., red.; SKRYABIN, K.I., akad., red.; SOKOLOV, M.I., prof. red.; SOLOV'YEV, V.D., prof., red.; TRIBULEV, G.P., dotsent, red.; CHUMAKOV, M.P., prof., red.; SHATROV, I.Y., prof., red.; TIMAKOV, V.D., prof., red.toma; TROITSKIY, V.L., prof., red. toma; PETROVA, N.K., tekhn.red.;

[Multivolume manual on the microbiology, clinical aspects, and epidemiology of infectious diseases] Mnogotomnoe rukovodstvo po mikrobiologii klinike i epidemiologii infektsionnykh boleznei. Otv. red. N.N.Zhukov-Verezhnikov. Moskva, Medgiz. Vol.1. [General microbiology] Obshchaia mikrobiologiia. Otv. red. N.N.Zhukov-Verezhnikov. 1962. 730 p. (MIRA 15:4)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for Zhdanov, Zhukov-Verezhnikov, Vygodchikov, Bilibin, Vashkov, Gromashevskiy, Zdrodovskiy, Rudnev, Sergiyev, Chumakov, Timakov, Troitskiy).

(Continued on next card)

BUGROVA, V.I.---(continued) Card 3.

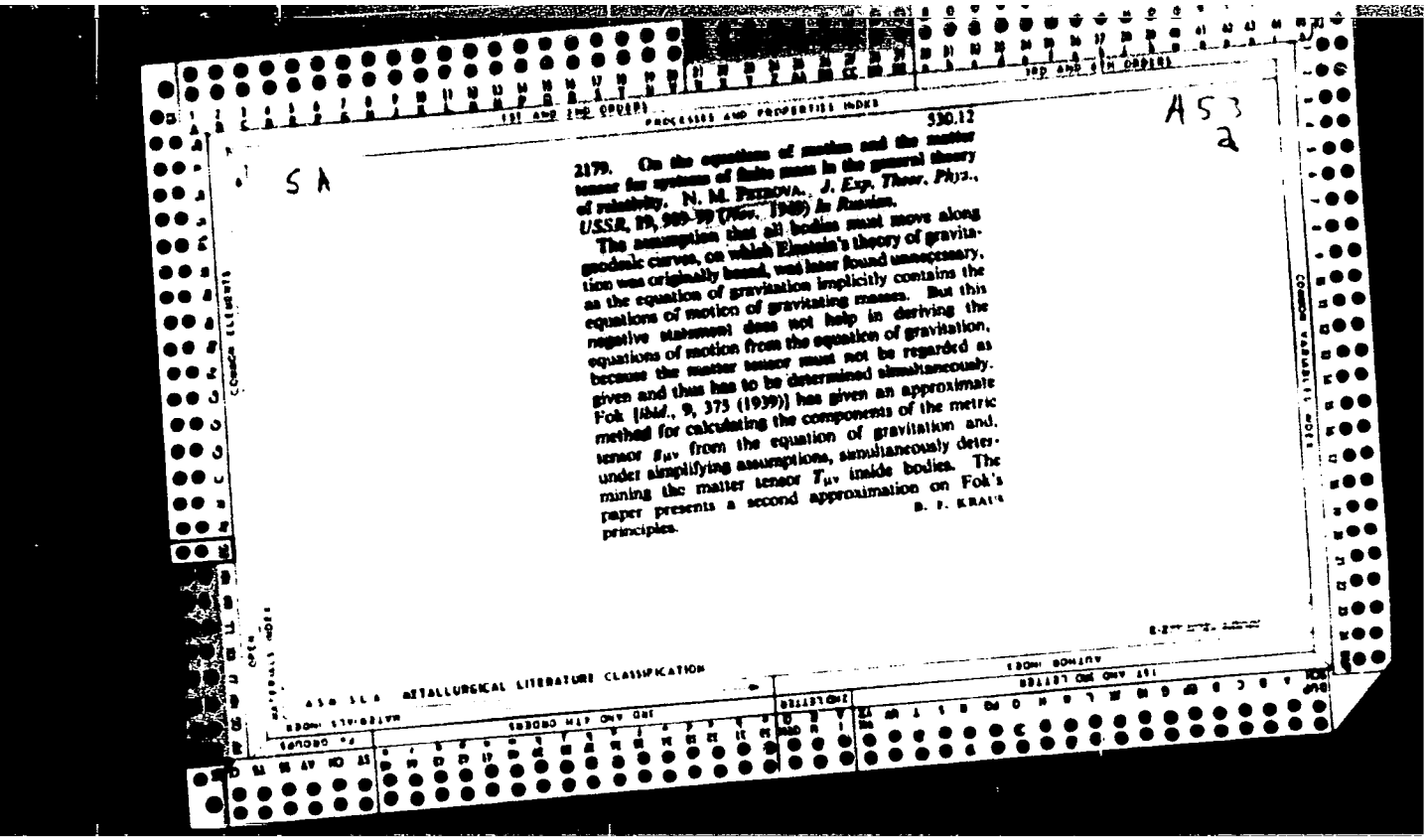
2. Chlen-korrespondent Akademii nauk SSSR (for Imshenetskiy, Krasil'nikov). 3. Chlen-korrespondent Akademii meditsinskikh nauk SSSR (for Planel'y s, Baroyan, Boldyrev, Gorizontov, Petrishcheva, Rogozin). 4. Deystvitel'nyy chlen Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk im. V.I.Lenina (for Muromtsev).

(MICROBIOLOGY)

PETROVA, N. M.

Ya. Ya. Dodonov, N. K. Pado, K. K. Petelina, and N. M. Petrova - "Synthesis of the racemic oxides of N-propyl- and N-isopropyltetrahydroquinoline." (p. 1058)

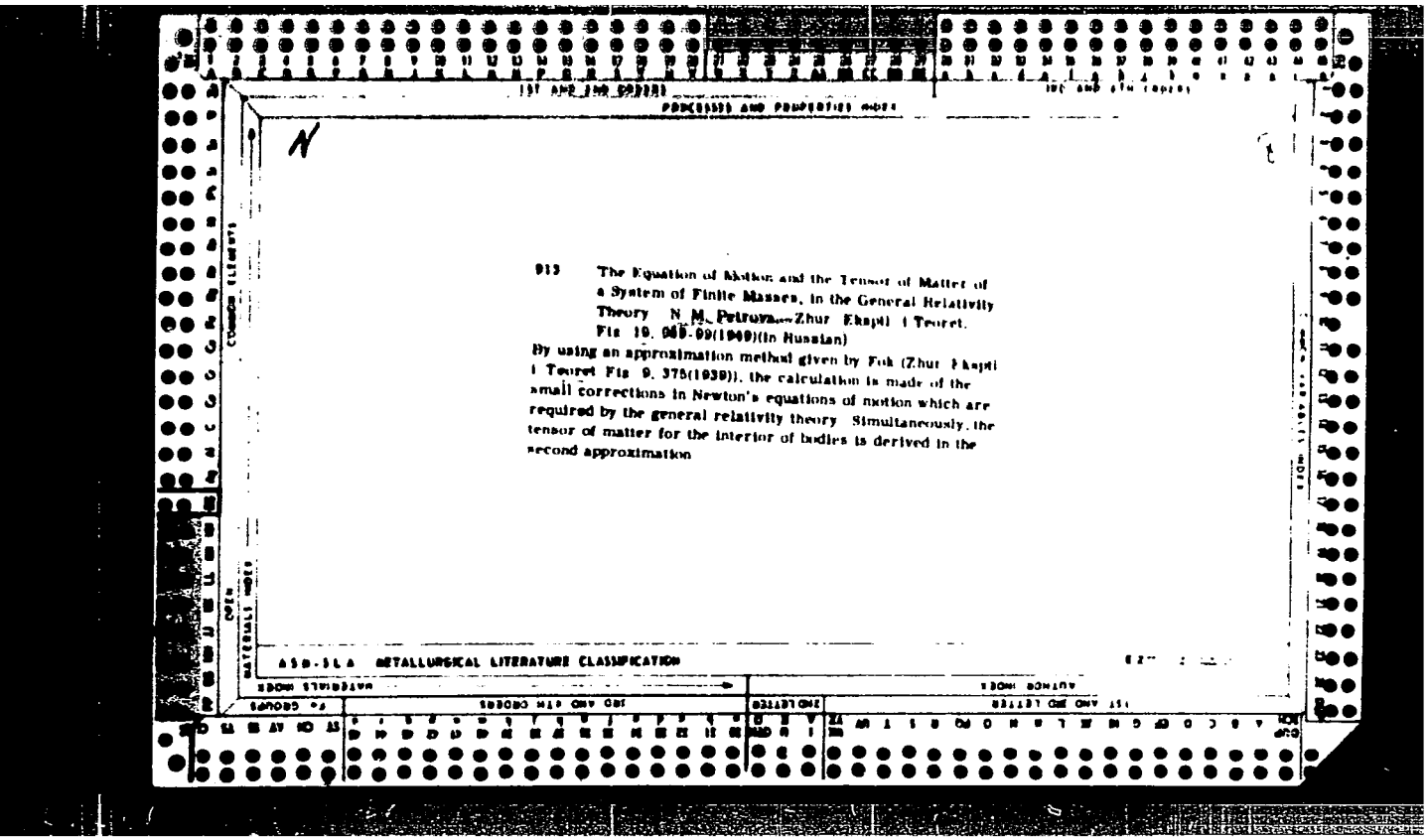
SO: Journal of General Chemistry, (Zhurnal Obshchei Khimii), 1950, Vol. 20, No. 6.



2179. On the equations of motion and the matter tensor for systems of finite mass in the general theory of relativity. N. M. PETROVA. *J. Exp. Theor. Phys.*, *USSR*, 19, 989–99 (Nov., 1949) *In Russian.*

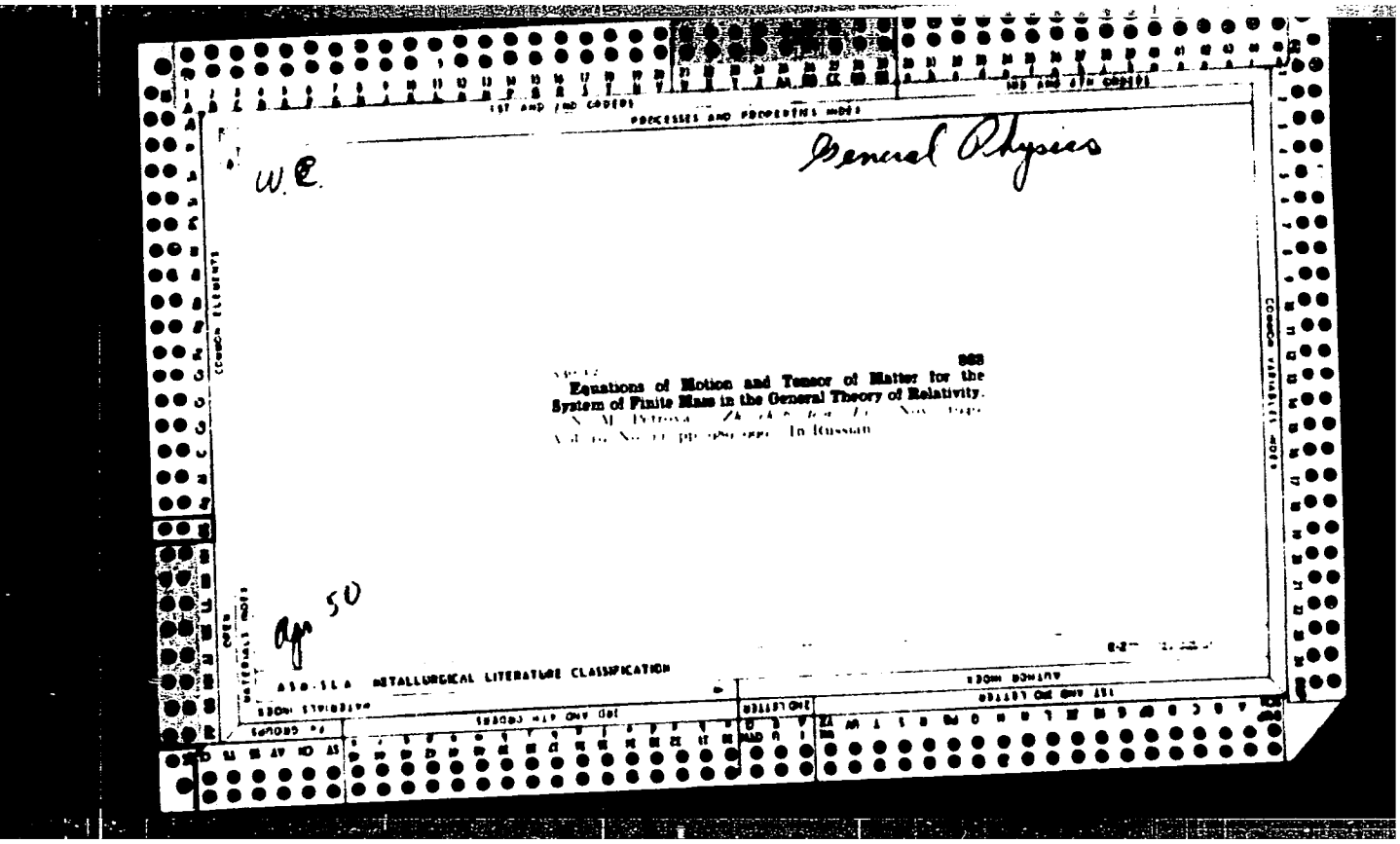
The assumption that all bodies must move along geodesic curves, on which Einstein's theory of gravitation was originally based, was later found unnecessary, as the equation of gravitation implicitly contains the equations of motion of gravitating masses. But this negative statement does not help in deriving the equations of motion from the equation of gravitation, because the matter tensor must not be regarded as given and thus has to be determined simultaneously. Fok [*Ibid.*, 9, 375 (1939)] has given an approximate method for calculating the components of the metric tensor $g_{\mu\nu}$ from the equation of gravitation and, under simplifying assumptions, simultaneously determining the matter tensor $T_{\mu\nu}$ inside bodies. The paper presents a second approximation on Fok's principles.

B. P. KRAI'S



913 The Equation of Motion and the Tensor of Matter of a System of Finite Masses, in the General Relativity Theory N. M. Petrova--Zhur. Eksptl. i Teoret. Fiz. 10, 965-99(1940)(In Russian)

By using an approximation method given by Fok (Zhur. Eksptl. i Teoret. Fiz. 9, 375(1939)), the calculation is made of the small corrections in Newton's equations of motion which are required by the general relativity theory. Simultaneously, the tensor of matter for the interior of bodies is derived in the second approximation.



PETROVA, N. M.

Petrova, N. M. On the equations of motion and the mass integral for systems of finite mass in the general theory of relativity. Akad. Nauk SSSR. Zhurnal Eksper. Teoret. Fiz. 19, 989–999 (1949). (Russian)

This paper discusses the problem of determining the motion of a finite body by means of Einstein's gravitational equations. As in the fundamental paper of Einstein, Infeld and Hoffman [Ann. of Math. (2) 39, 65–100 (1938)], the method followed is one of successive approximation to the solution of the field equations. However, this paper is more closely related to one by V. A. Fock [Akad. Nauk SSSR. Zhurnal Eksper. Teoret. Fiz. 9, 375–410 (1939)] which it refines in two details: (a) the correction due to general relativity theory of the Newtonian equations for a body is carried to a second approximation, (b) an approximation for the spatial components of the energy-momentum tensor for the same problem is obtained. The author, who makes no reference to the paper of Lichnerowicz on the same subject [J. Math. Pures Appl. (9) 23, 37–63 (1944)], these Rev. 7, 266] claims that Fock's method has two advantages on that of Einstein, Infeld and Hoffman. First, the latter by treating matter as a point singularity are unable to determine the "energy-momentum tensor." Secondly, Fock's use of "harmonic" coordinates in which $((-g)^{1/2}g^{\mu\nu})_{,\nu}=0$ greatly simplifies the calculations.

Source: Mathematical Reviews, 1950 Vol. 11 No. 6

However, (or Fock and Petrova, harmonic coordinates are not merely a labour-saving device but involve a matter of principle on which they take issue with Einstein and Infeld [Ann. of Math. (2) 41, 455–464 (1940); these Rev. 1, 283]. Petrova writes, "This system of coordinates (harmonic) . . . play in the general relativity theory the role of inertial coordinates in flat space. . . . Guided by the idea of equal rights for all coordinate systems in general relativity theory, they [Einstein, Infeld and Hoffman] consider the problem of finding invariant equations independent of the choice of coordinates. The assumption that all coordinate systems have equal rights does not appear to be correct. As Fock has shown, the harmonic coordinate system is preminent over all other. The choice of any other coordinates leads to much more involved calculation but further, the motion of the particles in the new system cannot be interpreted as instantaneous motion of a particle in space. If our equations are evaluated in the case of a system of two particles they coincide with those of Einstein, Infeld and Hofman, which means that, to the given approximation, the system of coordinates chosen by these authors is harmonic." More data on the problem of coordinates are contained in the recent paper of Einstein and Infeld [Canadian J. Math. 1, 209–241 (1949); these Rev. 11, 57] which Petrova had naturally not seen. Fortunately it is the duty of a reviewer merely to state and not to resolve such issues. However, it is perhaps worth suggesting that if Fock is right, the existence of a special "inertial" coordinate system, in which alone Newton's laws are valid, in the first approximation, would provide a method of resolving the vexed problem of the apparent absoluteness of rotation as evidenced by Foucault's pendulum.

A. J. Coleman.

Source: Mathematical Reviews, 1950 Vol 11 No. 6

21(8) PHASE I BOOK EXPLOITATION SOV/1316

Akademiya nauk Kazakhskoy SSR. Institut yadernoy fiziki

Trudy, t. 1 (Transactions of the Institute of Nuclear Physics, Kazakh SSR Academy of Sciences. v.1) Alma-Ata, Izd-vo AN Kazakhskoy SSR, 1958. 2,000 copies printed.

Ed.: Osadchiy, F. Ya.; Tech. Ed.: Alferova, P.F.; Editorial Board of Series: Griman, I.G., I.G. Dem'yanikov (resp. ed.), T.P. Diogenova, and S.K. Kalinin.

PURPOSE: This volume of the "Trudy" is intended for specialists (Physicists, physicochemists, physicist-metallurgists, etc.), scientists, engineers, teachers, and postgraduate students (aspiranty).

Coverage: This volume of the "Trudy" contains results of research performed at the "Institut yadernoy fiziki" (Institute of Nuclear Physics) in the years 1954-1956. The first article is concerned with the interaction of cosmic-ray particles with nuclei of

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various substances, and with the nature of secondary particles. Particular attention is given to the generation of mesons in showers. The next article discusses the motion of charged particles from the point of view of the general theory of relativity. A series of articles presents the problems of changes in the plasticity, strength, and hardness of alloys at various temperatures in relation to their chemical and phase compositions. Data are given on the properties of alloys during crystallization with reference to hot-shortness. Separate problems of the theory of shaping are also included. Spectrum analysis is discussed as applied to the study of arc performance and to the determination of rare earth elements in minerals. The text also describes quantitative x-ray spectrum analysis based on the various spectrum series.

TABLE OF CONTENTS:

AVAILABLE: Library of Congress

Card 6/6

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4-6-59

VULIS, L.A., otv. red.; KASHKAROV, V.P., red.; KOSOV, N.D., red.; PETROVA, N.M., red.; KASHKAROV, L.D., tekhn. red.

[Study of transfer processes. Problems in the theory of relativity] Issledovanie protsessov perenosa. Voprosy teorii otnositel'nosti. Alma-Ata, Uchpedgiz Kazakhskoi SSR. 1960. 161 p. (Its Trudy, no.2) (MIRA 17:3)

1. Alma-Ata. Universitet.

VULIS, L.A., otv.red.; KASHKAROV, V.P., red.; KOSOV, N.D., red.; PETROVA, N.M., red.; KASHKAROV, L.D., tekhn.red.

[Investigation of transfer processes. Problems of the theory of relativity] Issledovanie protsessov perenosa. Voprosy teorii otnositel'nosti. Alma-Ata, 1959. 236 p.
(MIRA 14:2)

1. Alma-Ata. Universitet.
(Relativity (Physics)) (Chemistry, Physical and theoretical)

20994

S/058/61/000/005/[illegible]/[illegible]
A001/A101

24.4200
AUTHORS: Aytikeyeva, Z.A., Petrova, N.M.

TITLE: On the system of spherically symmetric bodies in the general theory of relativity

PERIODICAL: Referativnyy zhurnal. Fizika, no 5, 1961, 17, abstract 5A208 (V sb. "Issled. protsessov perenosa. Vopr. teorii otnositel'nosti", Alma-Ata, 1959, 209 - 229)

TEXT: Gravitational equations are solved for a system of rotating bodies in the harmonic coordinate system by the approximate method of V.A. Fok (Zh. eksperim. i teor. fiz.", 1939, v 9, 375). Equations of motion of inertia centers of bodies and equations of rotation of bodies about their inertia centers are found from the condition of harmonicity.

[Abstracter's note: Complete translation.]

Card 1/1

2

L 10687-63 EPR/EWP(j)/EPF(c)/EWT(m)/BDS--ASD--Ps-4/Pc-4/Pr-4--RM/WW S/0153/63/006/002/0294/0298 73 72

ACCESSION NR: AP3002401

AUTHOR: Davankov, A. B.; Zubakova, L. B.; Petrova, N. M.

TITLE: Synthesis and study of copolymers of 2-methyl-5-vinylpyridine with mono-, di-, and triethylene glycol methacrylates

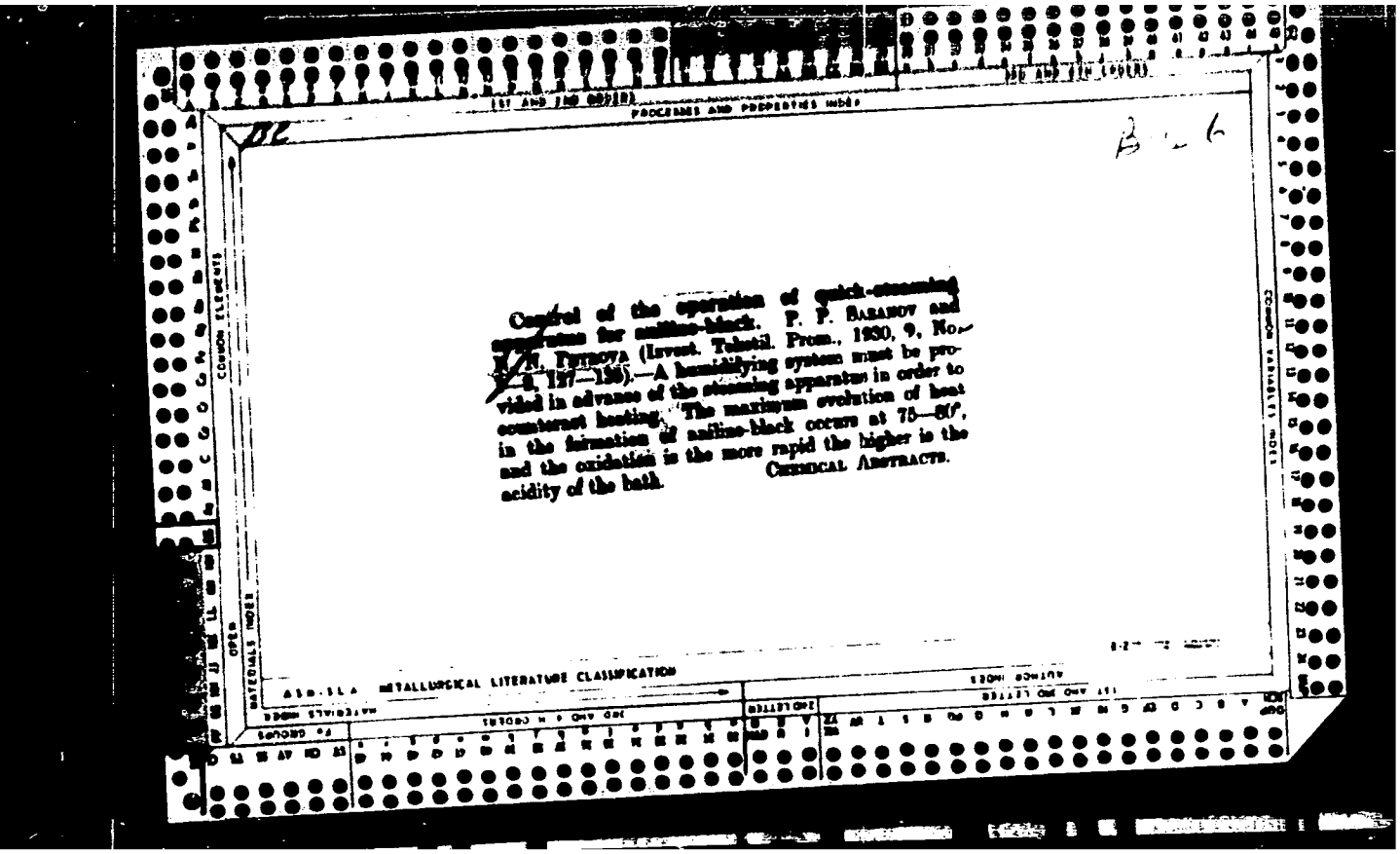
SOURCE: IVUZ. Khimiya i khimicheskaya tekhnologiya, v. 6, no. 2, 1963, 294-298

TOPIC TAGS: copolymers, 2-methyl-5-vinylpyridine, monoethylene-glycol diethylene-glycol triethylene-glycol methacrylates, ion exchangers, crosslinking agent, absorption capacities, weakly basic resin, strongly basic resin

ABSTRACT: A series of copolymers in bead form were prepared by suspension polymerization. Some were quaternized with benzyl chloride. Both weakly and strongly basic resins were evaluated as ion exchangers and their stability to elevated temperatures, strong nitric acid, and strong alkali were determined and related to the type and quantity of crosslinking agent used. Copolymers of methylvinylpyridine with triethylene glycol methacrylate attained the highest absorption capacities, 45-73% by weight of absorbent, towards phenol. Orig. art. has: 5 figures and 2 tables.

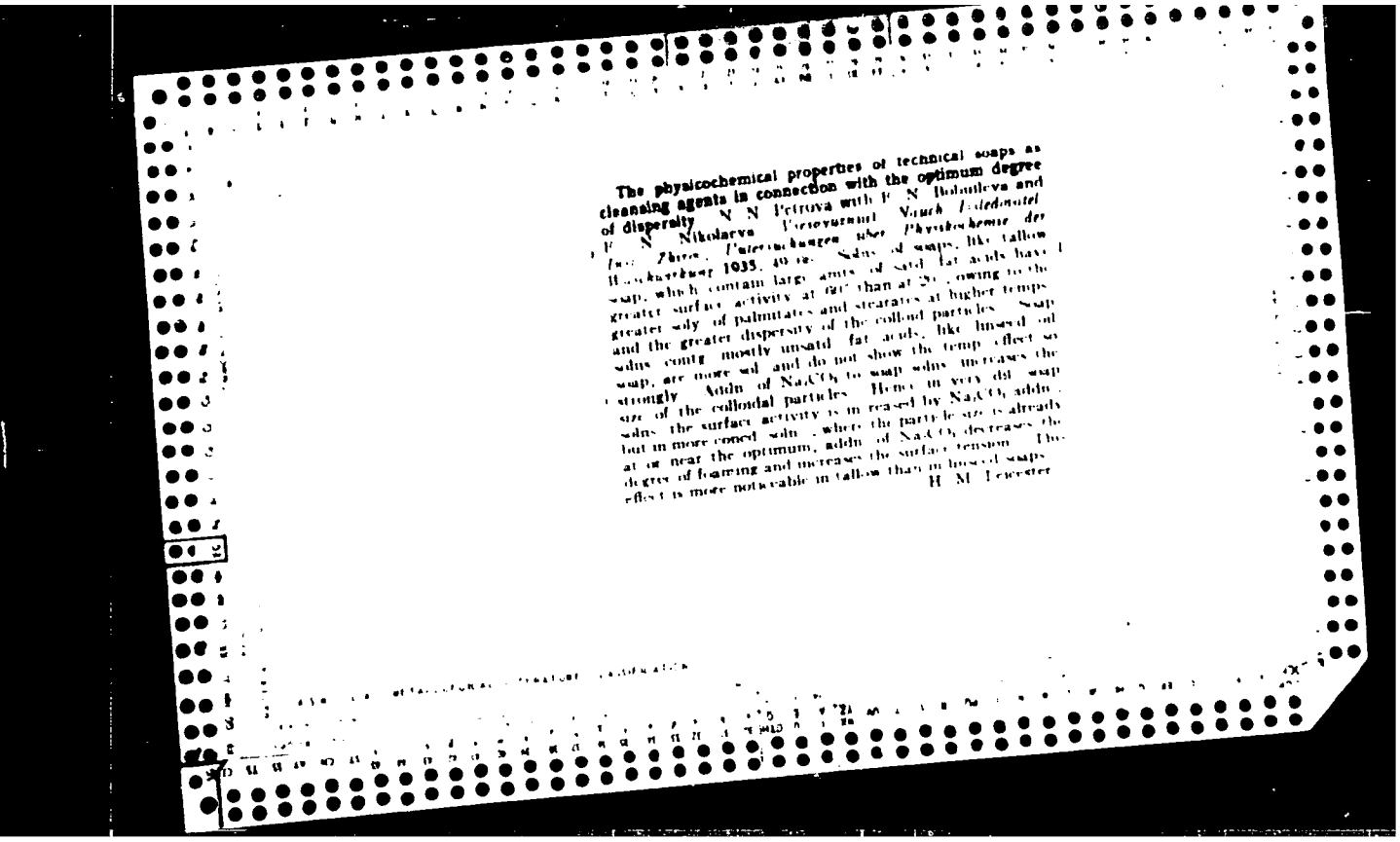
Moscow Chem. Engineering Inst.

Card 1/2



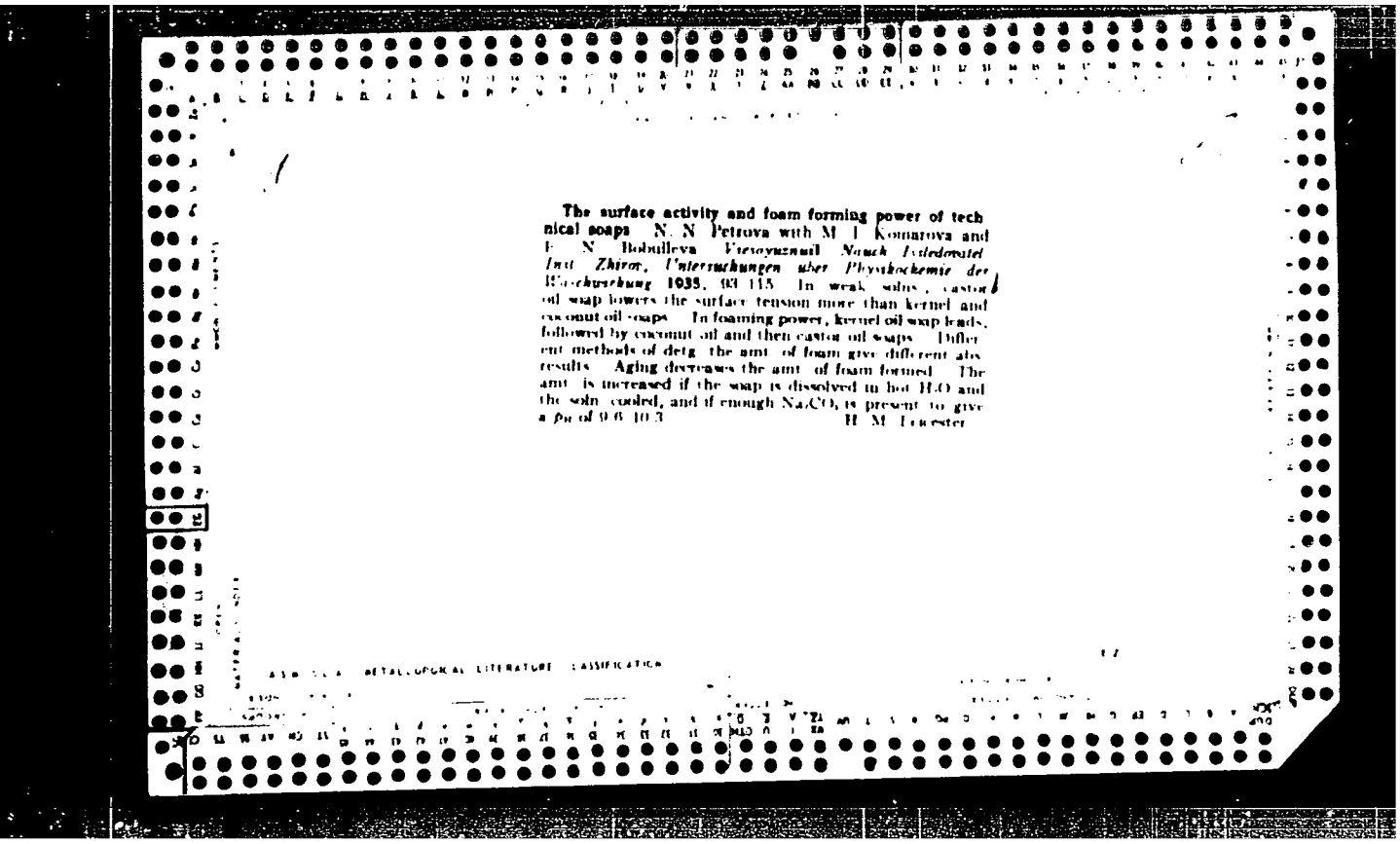
Control of the operation of quick-steaming apparatus for aniline-black. P. P. Barabov and V. N. Tyrnova (Izvest. Tekstil. Prom., 1930, 9, No. 6, 127—130).—A humidifying system must be provided in advance of the steaming apparatus in order to counteract heating. The maximum evolution of heat in the formation of aniline-black occurs at 75—80°, and the oxidation is the more rapid the higher is the acidity of the bath.

CHEMICAL ABSTRACTS.



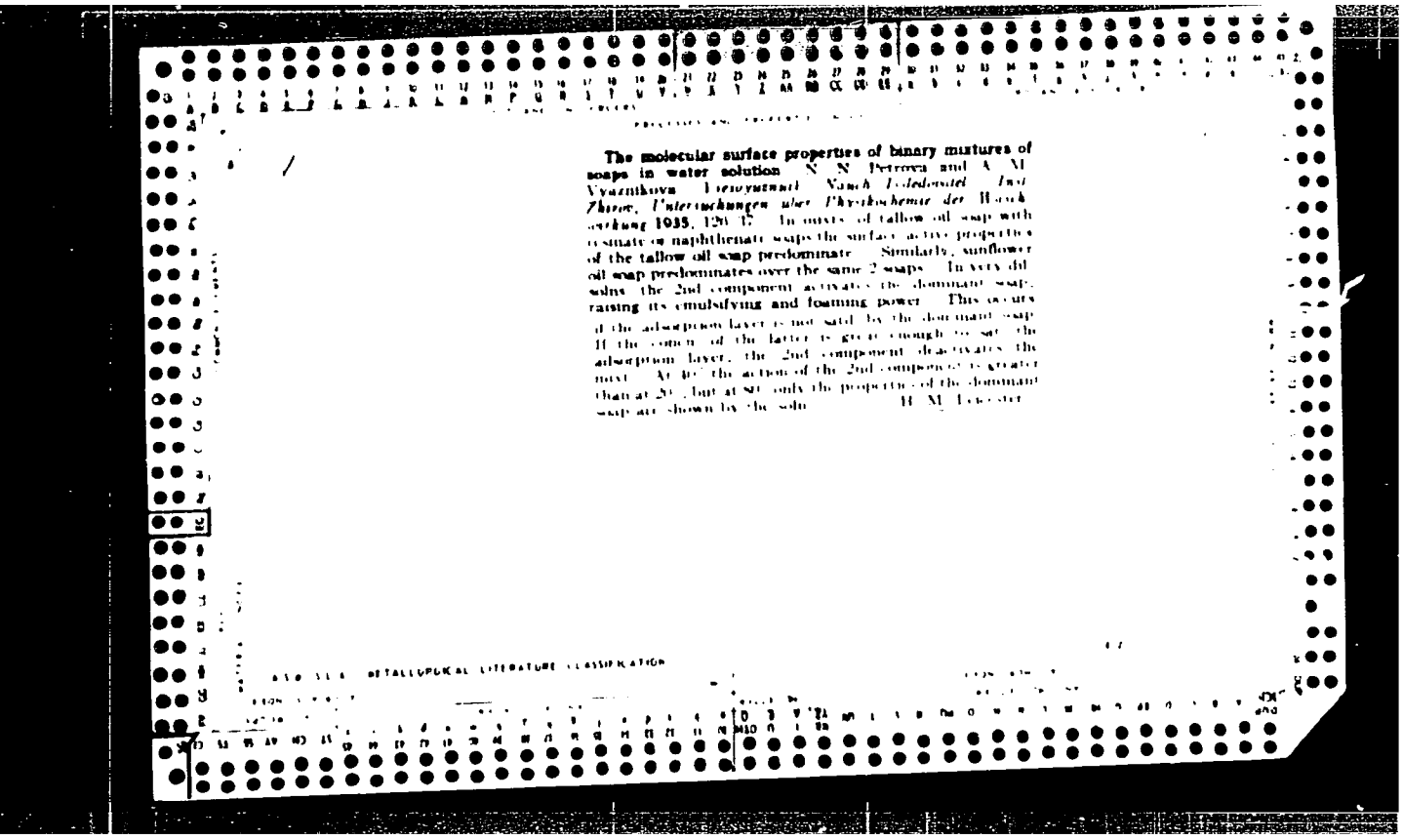
The physicochemical properties of technical soaps as cleansing agents in connection with the optimum degree of dispersity. N. N. Petrova with P. N. Bobuleva and P. N. Nikolaeva. *Untersuchungen über Physikochemie der [illegible] Zhirov. Untersuchungen über Physikochemie der Hautschutzmittel* 1935. 40 pp. Salts of soaps, like tallow soap, which contain large amts. of satd. fat acids have greater surface activity at 22° than at 50°, owing to the greater solv. of palmitates and stearates at higher temps. and the greater dispersity of the colloid particles. Soap solns. contg. mostly unsatd. fat acids, like linseed oil soap, are more sol. and do not show the temp. effect so strongly. Addn. of Na_2CO_3 to soap solns. increases the size of the colloidal particles. Hence in very dil. soap solns. the surface activity is increased by Na_2CO_3 addn., but in more concd. solns., where the particle size is already at or near the optimum, addn. of Na_2CO_3 decreases the degree of foaming and increases the surface tension. This effect is more noticeable in tallow than in linseed soaps.

H. M. Leicester

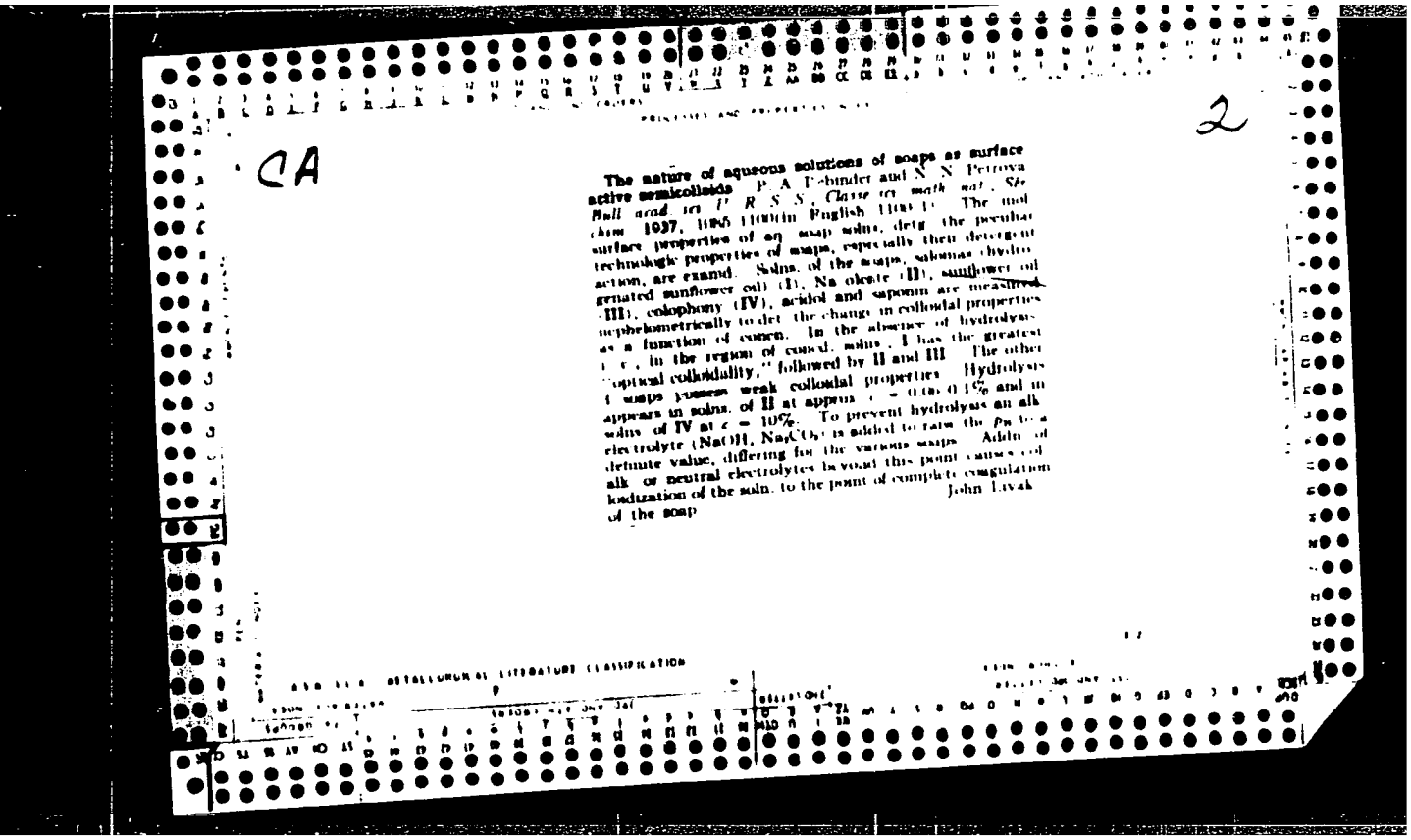


The surface activity and foam forming power of technical soaps N. N. Petrova with M. I. Komarova and E. N. Bobuileva. *Vsesoyuznuil Nauch. Issledovatel. Inst. Zhirov, Untersuchungen über Physikochemie der Waschwirkung* **1935**, 93-115. In weak solns., castor oil soap lowers the surface tension more than kernel and coconut oil soaps. In foaming power, kernel oil soap leads, followed by coconut oil and then castor oil soaps. Different methods of detg. the amt. of foam give different abs. results. Aging decreases the amt. of foam formed. The amt. is increased if the soap is dissolved in hot H_2O and the soln. cooled, and if enough Na_2CO_3 is present to give a p_H of 9.6-10.3.

H. M. Leicester



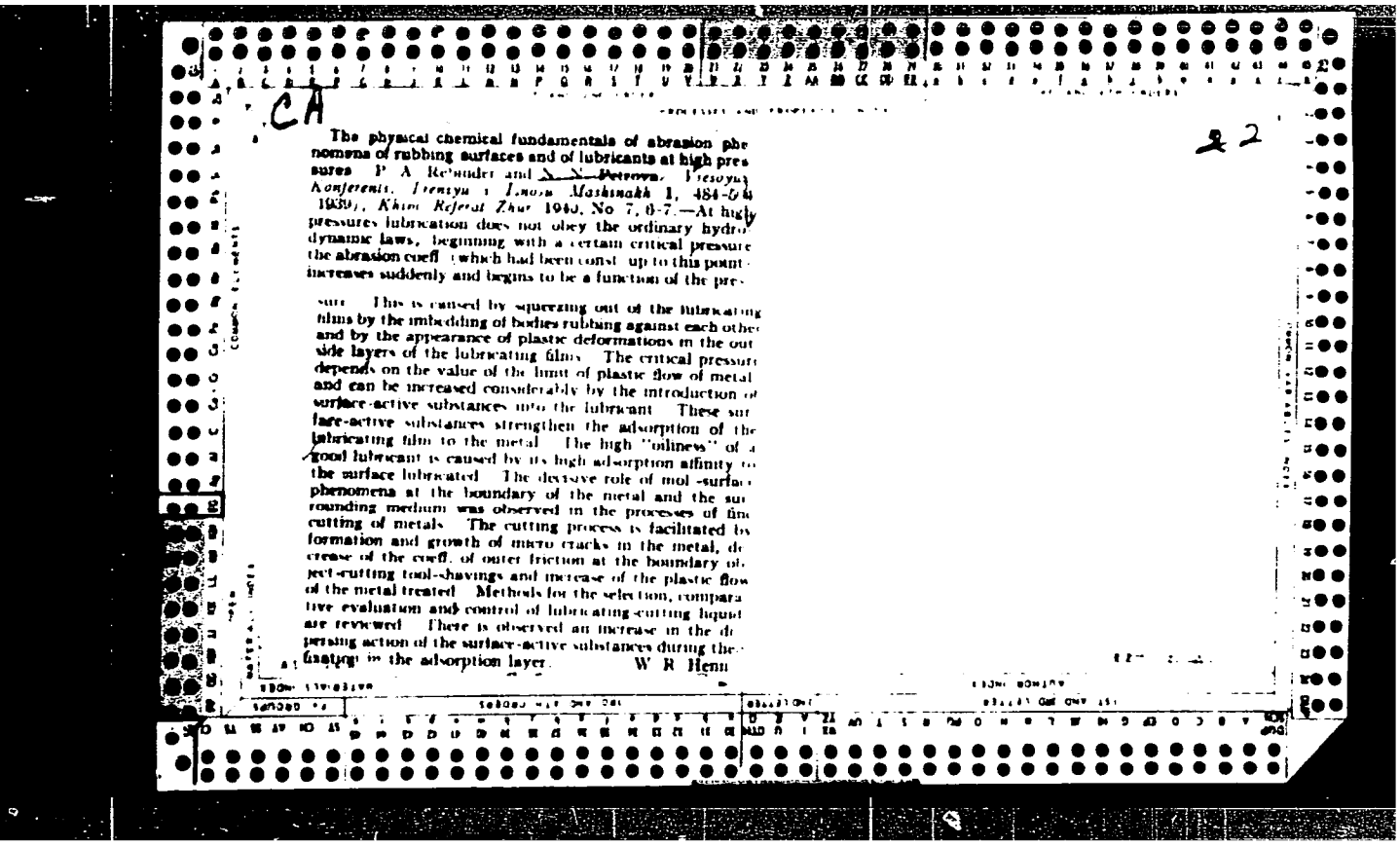
The molecular surface properties of binary mixtures of soaps in water solution N. N. Petrova and A. M. Vyazmikova *Trudy Vsesoyuznoi Nauch. Issledovatel. Inst. Zhirov, Untersuchungen über Physikochemie der Wasch-wirkung* 1935, 129-37. In mixts. of tallow oil soap with sodium α-naphthenate soaps the surface active properties of the tallow oil soap predominate. Similarly, sunflower oil soap predominates over the same 2 soaps. In very dil. solns. the 2nd component activates the dominant soap, raising its emulsifying and foaming power. This occurs if the adsorption layer is not satd. by the dominant soap. If the concn. of the latter is great enough to sat. the adsorption layer, the 2nd component deactivates the mixt. At 0° the action of the 2nd component is greater than at 20°, but at 50° only the properties of the dominant soap are shown by the soln. H. M. Leicester



CA

2

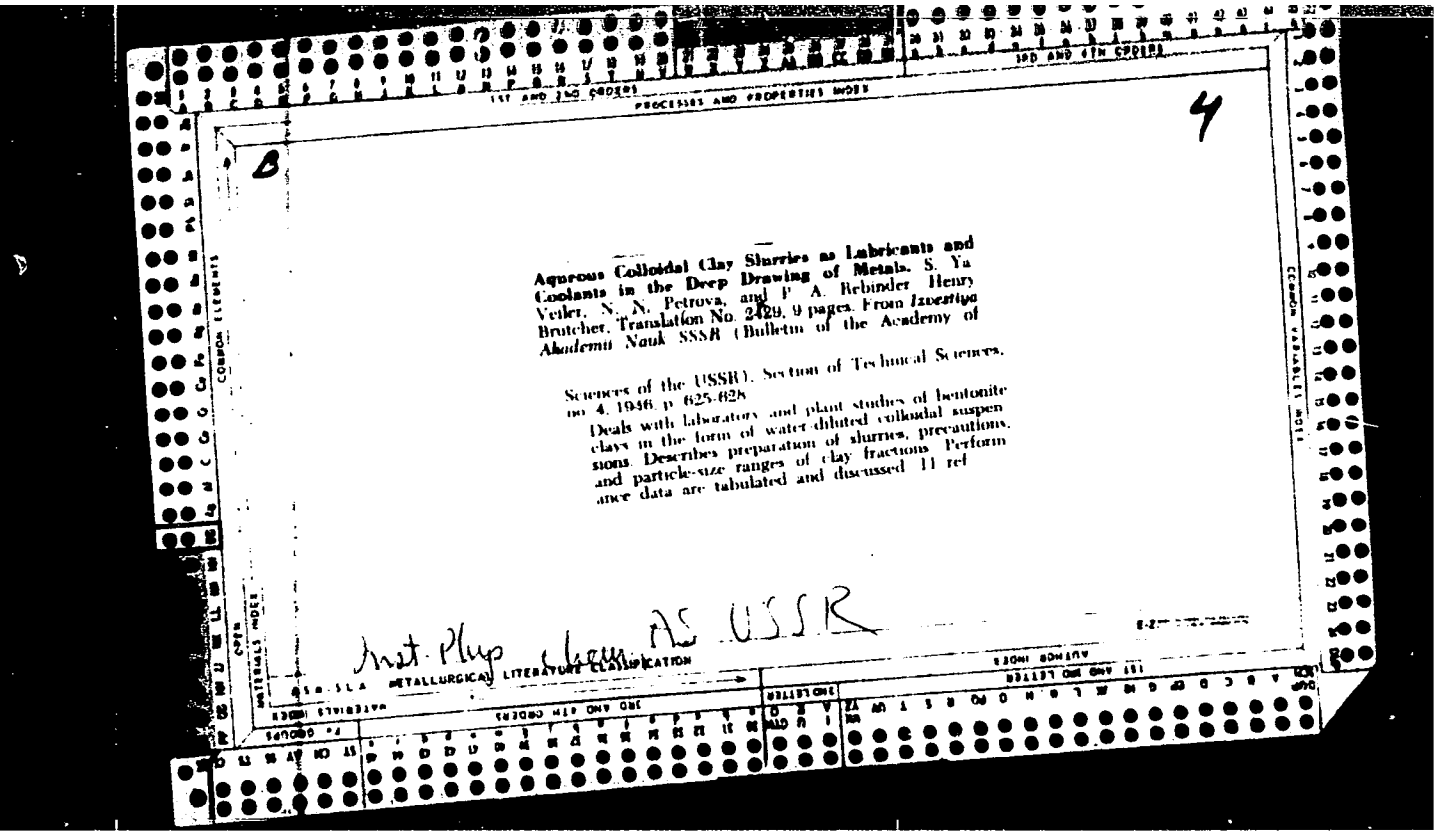
The nature of aqueous solutions of soaps as surface active semicolloids P. A. Rehinder and N. N. Petrova *Bull. acad. sci. U. R. S. S., Classe sci. math. nat., Sér. chim.* 1937, 1165-1180(in English, 1181). The mol. surface properties of an assp. soln., detg. the peculiar technologic properties of soaps, especially their detergent action, are examd. Solns. of the soaps, sakunas (hydrogenated sunflower oil) (I), Na oleate (II), sunflower oil (III), colophony (IV), acidol and saponin are measured nephelometrically to det. the change in colloidal properties as a function of concn. In the absence of hydrolysis, i. e., in the region of concd. solns., I has the greatest "optical colloidality," followed by II and III. The other 3 soaps possess weak colloidal properties. Hydrolysis appears in solns. of II at approx. $c = 0.05$ to 0.1% and in solns. of IV at $c = 10\%$. To prevent hydrolysis an alk. electrolyte ($NaOH$, Na_2CO_3) is added to raise the p_H to a definite value, differing for the various soaps. Addn. of alk. or neutral electrolytes beyond this point causes coagulation of the soln. to the point of complete coagulation of the soap. John Livak



CA

22

The physical chemical fundamentals of abrasion phenomena of rubbing surfaces and of lubricants at high pressures P A Rebinder and N V Petrova, *Tresyuz Konferents. Trenyu i Iznos Mashinakh* 1, 484-6 (1939); *Khim Referat Zhur* 1940, No 7, 6-7.—At high pressures lubrication does not obey the ordinary hydrodynamic laws, beginning with a certain critical pressure the abrasion coeff (which had been const up to this point) increases suddenly and begins to be a function of the pressure. This is caused by squeezing out of the lubricating films by the imbedding of bodies rubbing against each other and by the appearance of plastic deformations in the outside layers of the lubricating films. The critical pressure depends on the value of the limit of plastic flow of metal and can be increased considerably by the introduction of surface-active substances into the lubricant. These surface-active substances strengthen the adsorption of the lubricating film to the metal. The high "oiliness" of a good lubricant is caused by its high adsorption affinity to the surface lubricated. The decisive role of mol.-surface phenomena at the boundary of the metal and the surrounding medium was observed in the processes of fine cutting of metals. The cutting process is facilitated by formation and growth of micro cracks in the metal, decrease of the coeff. of outer friction at the boundary of object-cutting tool-shavings and increase of the plastic flow of the metal treated. Methods for the selection, comparative evaluation and control of lubricating-cutting liquids are reviewed. There is observed an increase in the dispersing action of the surface-active substances during the grinding in the adsorption layer. W R Henn



4

Aqueous Colloidal Clay Slurries as Lubricants and Coolants in the Deep Drawing of Metals. S. Ya Veiler, N. N. Petrova, and P. A. Rebinder. Henry Brutcher, Translation No. 2429, 9 pages. From *Izvestiya Akademii Nauk SSSR* (Bulletin of the Academy of Sciences of the USSR), Section of Technical Sciences, no. 4, 1946, p. 625-628.

Deals with laboratory and plant studies of bentonite clays in the form of water-diluted colloidal suspensions. Describes preparation of slurries, precautions, and particle-size ranges of clay fractions. Performance data are tabulated and discussed. 11 ref.

Inst. Phys. Chem. AS USSR

L 06318-67 EWT(1) GW

ACC NR: AR6016294 SOURCE CODE: UR/0269/66/000/001/0065/0065

AUTHOR: Petrova, N. N.

TITLE: Spectrophotometry of the lunar maria

SOURCE: Ref. zh. Astronomiya, Abs. 1.51.513

REF SOURCE: Izv. Gl. astron. observ. v Pulkove, v. 24, no. 2, 1965, 168-174

TOPIC TAGS: lunar surface, lunar reflectivity, spectrophotometry

ABSTRACT: Observations were carried out at the Astrophysical Institute AN KazSSR (Astrofizicheskiy institut AN KazSSR) during 1963, using a spectrometer in the wavelength range 3500 - 7000 A. The spectrometer slit defined a section on the lunar surface with dimensions of 20 x 30". The energy distribution in the spectrum of Mare Crisium, Mare Tranquillitatis, Mare Serenitatis, and Sinus Iridum was investigated. Stars with known energy distribution found previously by A. V. Kharitonov were used as the spectrophotometric standard. The spectra were on the average over 50 A. Graphs of the dependence of the reflectivity of the lunar maria on wavelength in arbitrary units are presented in the article. On the basis of this material the author notes the similarity of the lunar rock covering the

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ACC NR: AR6016294

maria with basaltic tuffs. As a whole, the obtained curves agree, in the author's opinion, with analogous curves obtained by other authors. At the same time it is indicated that for $\lambda < 3900$ A an increase of reflectivity is observed in contrast with the investigations of other authors. Bibliography of 22 citations. I. Kobal' [Translation of abstract]

SUB CODE: 03

Card 2/2

ACC NR: AR6034896 SOURCE CODE: UR/0269/...

AUTHOR: Krat, V. A.; Petrova, N. N.

TITLE: Wave motions in solar photosphere

SOURCE: Ref. zh. Astronomiya, Abs. ...

REF SOURCE: Solnechnyye dannyye, no. ..., 19..., ...

TOPIC TAGS: solar photosphere, photoelectric ..., monochromatic scintillation, image vibration

ABSTRACT: The results of observations ... spectrograph which was installed ... telescope of the Main Astron... the spectrograms ... range. The results ... confirm the dependence ... and this conclusion ... image vibration ... formation.

[illegible] appears in the observed dependence [illegible] continuum wavelength. G. Vasil'yeva, [illegible]

SUB CODE: 03/

Card 2/2

PROKOF'YEV, V.K.; PETROVA, N.N.

Presence of oxygen in the atmosphere of Venus. Izv. Krym. astrofiz. obser. 29:3-14 '63. (MIRA 16:10)

MARKHEL', Pavel Sil'vestrovich, kand. tekhn. nauk; PETROVA, Nina Nikolayevna, nauchnyy sotr.; RUSANOVA, Aleksandra Viktorovna, nauchn. sotr.; IZMAIL, Lyudmila Nikiforovna, nauchn. sotr.; BABUSHKIN, Aleksey Il'ich, master po remontu; IVANOV, Viktor Tikhonovich, pechnik; ALEKSANDROV, Vladimir Mefod'yevich, inzh.; KONOVTSEV, Svyatoslav Vsevolodovich, inzh.-mekhanik; PRITYKINA, L.A., red.; KISINA, Ye.I., tekhn. red.

[Handbook on the overhauling of bakery equipment] Spravochnik po kapital'nomu remontu khlebopekarnogo oborudovaniia. Moskva, Pishchepromizdat, 1963. 307 p. (MIRA 16:7)

1. Moscow. TSentral'nyy nauchno-issledovatel'skiy institut khlebopekarnoy promyshlennosti. Leningradskoye otdeleniye. 2. Zaveduyushchiy sektorom ekonomiki, organizatsii proizvodstva i truda Leningradskogo otdeleniya TSentral'nogo nauchno-issledovatel'skogo instituta khlebopekarnoy promyshlennosti (for Markhel').

(Bakeries--Equipment and supplies)
(Food machinery--Maintenance and repair)

PETROVA, N. N.

"On The Presence of Oxigen in The Atmosphere of Venus"

report presented at the 13th Intl. Astronautical Federation Congress (IAF)
Varna, Bulgaria, 23-29 Sep 1962

STEPANOV, V.Ye.; PETROVA, N.N.

Polarities and maximum strength of magnetic fields of sunspots in 1956. Izv.Krym.astrofiz.obser. 18:66-95 '58. (MIRA 13:4)

(Sunspots) (Magnetic fields)

3,1540 (1062,1128,1168)

Translation from: Referativnyy zhurnal, Astronomiya i Geodeziya, [illegible]
pp. 52-53, # 12292

AUTHORS: Stepanov, V. Ye., Petrova, N. N.

TITLE: Brightness of Flocculi, Magnetic Fields and [illegible]

PERIODICAL: Izv. Krymsk. astrofiz. observ., [illegible]

Summary

TEXT: In fields with H < [illegible] the brightness [illegible] average with increasing field intensity. This correlation is very [illegible] dual formations. Magnetic field determines the shape of [illegible] equal brightness are closely similar to isogausses. In fields with H > [illegible] the brightness of flocculi decreases with increasing field intensity. As a result, formations acquire the annular structure, sometimes of irregular [illegible] but centers of the rings, i. e., their darkest parts, coincide with [illegible] intensity of the field. Flocculi surrounding sunspots are also [illegible] shape. A study of flocculi appearance variations and magnetic [illegible]

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87357

Brightness of Flocculi, Magnetic Fields and Heating Mechanisms

has shown that magnetic fields affect the formation of flocculi. The divergence of magnetic force lines renders the flocculi more compact and brighter, respectively. The origination of a weak field leads to flocculi appearing. In regions where flares occur, the brightness of chromospheric formations increases follow the above mentioned regularities or the day of a flare. There exist two mechanisms of flocculi origination. The first mechanism is connected with the excitement of fast processes: flares and, possibly, "whiskers". In these cases the floccula appears as a result of the flare afterglow and the propagation of the wave. The second mechanism is also of electromagnetic nature and is connected with the absorption of magnetohydrodynamic waves and the resulting disturbances in regions where the intensity of a field, carried by the wave, is higher than the intensity of the external field. The magnitude of the absorption of magnetohydrodynamic waves is estimated. The absorption of the waves gives rise to the heating of flocculi regions at heights up to 500 km. In the region of sunspots the energy of the waves is higher, by two orders of magnitude, than the energy of waves in other regions of the atmosphere. Thus regions of maximum field may appear as those regions brighter with increasing

Card 2/3

A/357

[illegible]
AS[illegible]1/A[illegible]

Brightness of Flocculi, Magnetic Fields and Heating Mechanisms.

amounts of energy are transferred by waves from subphotospheric [illegible] layers into the corona, without a noticeable absorption in the [illegible] difficulties are listed which arise in explaining the heating of [illegible] absorption of magnetohydordynamic waves. There are [illegible] references.

Author's summary

Translator's note. This is the full translation of the original [illegible]

Card 3/3

L 15762-66 EWT(1) GW

ACC NR: AP6006781 SOURCE CODE: UR/0033/66/043/001/0162/0171

AUTHOR: Petrova, N. N.

41 B

ORG: Main Astronomical Observatory, Academy of Sciences SSSR (Glavnaya astronomicheskaya observatoriya Akademii nauk SSSR)

TITLE: Spectral investigations of the lunar surface

SOURCE: Astronomicheskiy zhurnal, v. 43, no. 1, 1966, 162-171

TOPIC TAGS: moon, lunar surface, selenography, lunar emission, spectrophotometry, solar radiation

ABSTRACT: The results are given of observations of 11 areas of the lunar surface made with the 50-cm "Gerts" reflector and photoelectric spectrophotometer of the Astrophysical Institute of the Kazakh Academy of Sciences. The relative distribution of spectral reflectivity was determined by comparing the lunar spectra with those of early-type stars and the solar spectrum. Variations of reflectivity with wavelength were found to be close to linear. The spectral brightness coefficients of certain terrestrial materials, which contain a considerable amount of quartz and other silicate oxide compounds, show the same variations and have similar inclination angles. A direct comparison of the spectra

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L 15762-66

ACC NR: AP6006781

of lunar details showed that the color differences are insignificant. However the curves of spectral brightness ratios are not monotonic and show considerable waviness. Humps in two spectral regions (with λ_{max} 5305 and 6680 Å) are interpreted as emission emanating from the lunar surface as a result of solar radiation. Various assumptions are made as to the nature of the solar radiation involved. Orig. art. has: 10 formulas and 5 tables.

[DM]

SUB CODE: 03/ SUBM DATE: 13May65/ ORIG REF: 017/ OTH REF: 010/ ATD PRESS: 4200

Card 2/2

PETROVA, N. P.

Mechnikov Inst. (-1944-).

"Choleraic bacteriophage."

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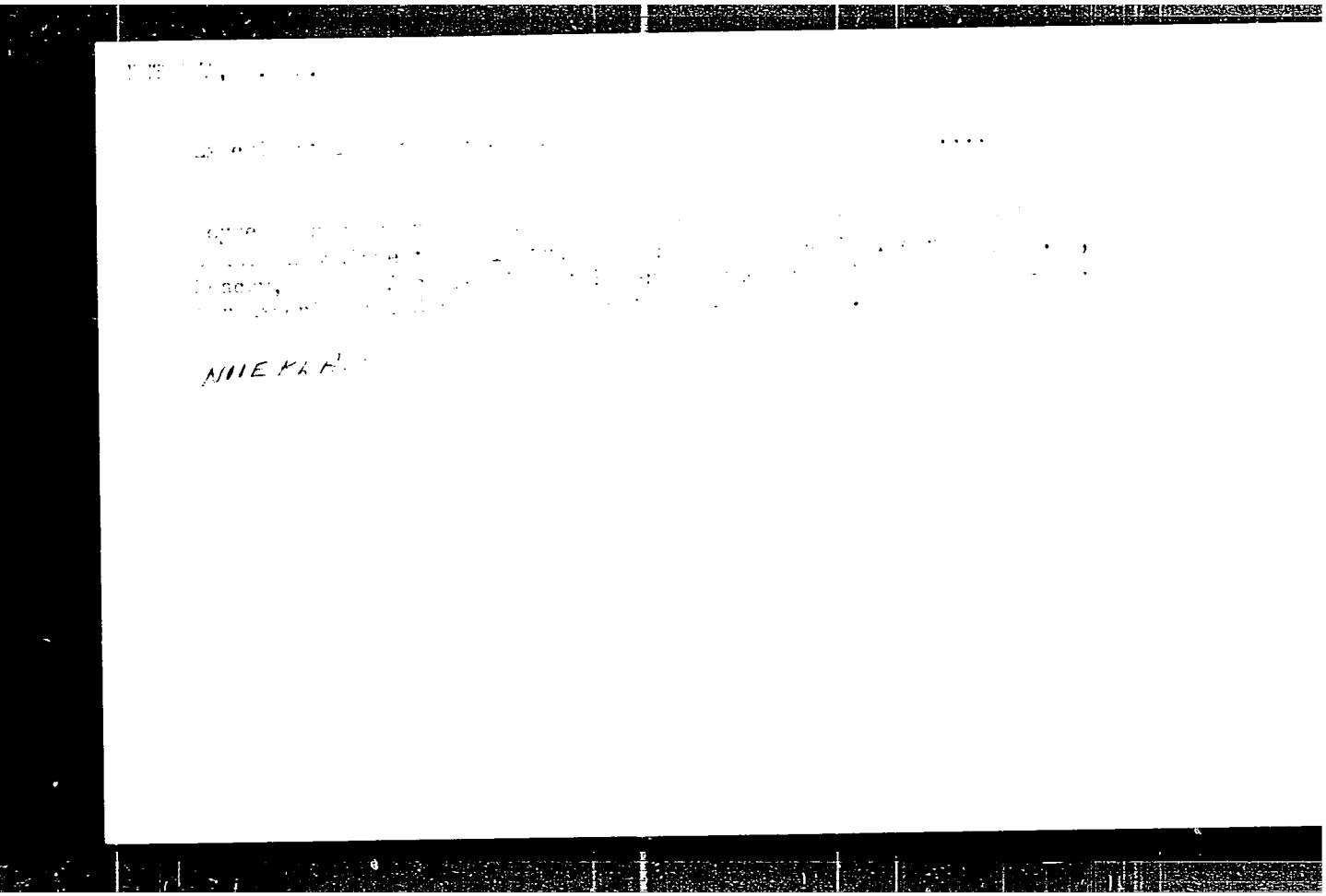

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Modern technical equipment for vascular surgery and prospects for its development. Khirurgiia 33 no.11:99-104 N '57. (MIRA 11:?)

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Use in surgery of items made from alloy K40NkhM. Med.prom. 12 no.6:9-12 Je '58 (MIRA 11:6)

1. Nauchno-issledovatel'skiy institut eksperimental'noy khirurgicheskoy apparatury i instrumentov.
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KAPITANOV, N.N., POTEKHINA, L.A., PETROVA, N.P.

Forces for suturing major blood vessels. Med.prom. 12 no.12:52-53 D'58 (MIRA 11:12)

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PETROVA, N. P.: Master Med Sci (Diss, -- "The [illegible] gland in diseases of the cariovascular system". Leningrad, [illegible] Order of Lenin Inst or the Advanced Trainin of Physicians im S. [illegible], 200 copies (KL, No 7, 1959, 129)

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Universal vasoneurographic apparatus. Voen.-med.zhur. no.7: 27-32 Jl '60. (MIRA 13:11)

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(NERVOUS SYSTEM surgery)
(BLOOD VESSELS surgery)

PETROVA, N.P.; KRYUCHKOVA, G.S.; GRIGOR'YEV, V.Ye.

Experience with permanent tantalum suturing of the bladder; experimental studies. Urologiia 24 no.1:41-46 Ja-F '59. (MIRA 12:1)

1. Iz Nauchno-issledovatel'skogo instituta eksperimental'noy khirurgicheskoy apparatury i instrumentov (dir. - M.G. Anan'yev) Ministerstva zdravookhraneniya SSSR i urologicheskogo otdeleniya (zav. - prof. L.I. Dunayevskiy) Gorodskoy klinicheskoy bol'nity No.6 v Moskve.

(BLADDER, surgery,
permanent double-row automatic tantalum suture in animals (Rus))

(SUTURES
permanent double-row automatic tantalum suture of bladder in animals (Rus))

PETROVA, N.P.

Plastic surgery of the abdominal aorta in experiment. Vest.Khir. 84 no.6:28-30 Je '60. (MIRA 13:12)
(ABDOMINAL AORTA--SURGERY)

PETROVA, N.P., kand.med.nauk

Method for the application of a mechanical vascular suture.
Vest.khir. 85 no.12:115-119 D '60. (MIRA 14:1)

1. Iz Nauchno-issledovatel'skogo instituta eksperimental'noy khirurgicheskoy apparatury i instrumentov (dir. - M.G. Anan'yev) i kafedry operativnoy khirurgii i topograficheskoy anatomii (zav. - prof. V.V. Kovanov) 1-go Moskovskogo ordena Lenina meditsinskogo instituta im. I.M. Sechenova.
(BLOOD VESSELS--SURGERY) (SUTURES)

PETROVA, N.P.; KUKUSHKIN, L.L.; POTEKHINA, L.A.; BOGOMOLOVA, G.P.

Apparatus for suturing the large blood vessels and its use. Trudy NIIEKHAI no.5:45-48 '61. (MIRA 15:8)

1. Nauchno-issledovatel'skiy institut eksperimental'noy khirurgicheskoy apparatury i instrumentov.
(SUTURES) (BLOOD VESSELS--SURGERY)

PETROVA, N.P.

Mechanical vascular suture in plastic surgery of the blood vessels. Eksp.khir.i anest. 6 no.2:41-46 '61. (MIRA 14:10)
(BLOOD VESSELS—SURGERY) (SUTURE)

PETROVA, N.P.

Restoration of blood circulation in paralyzed extremities following thrombosis of the abdominal aorta. Trudy 1-go MMI 16:147-154'62. (MIRA 16:6)

1. Iz Nauchno-issledovatel'skogo instituta eksperimental'noy khirurgicheskoy apparatury i instrumentov (dir. - M.G. Anan'yev).

(THROMBOSIS) (ABDOMINAL AORTA—SURGERY)

PETROVA, N.P., kand. med. nauk

Mechanical vascular suture in a growing organism. Khirurgiia 39 no.8:108-113 Ag '63. (MIRA 17:6)

1. Iz Nauchno-issledovatel'skogo instituta eksperimental'noy khirurgicheskoy apparatury i instrumentov (direktor: M.G. Anan'yev).

Country : USSR
Category: Virology. Bacterial Viruses [illegible]

Abs Jour: Ref Zhur-Biol., No 23, 1958, No [illegible]

Author : Ginzburg-Ostrovskaya, Ye. B.; Petrova, M.A.
Inst : -
Title : The Effectiveness of Typhoid Vi-Bacteriophage Experimentally and its Influence on the Microbial Organism

Orig Pub: Sb. Bakteriofagiya, Tbilisi, Gruzmedgiz, 1957, 183-195.

Abstract: It has been shown that the administration of typhoid Vi-phages to mice infected with typhoid bacteria protects 85-100 percent of the animals from death. O-phages do not possess this property. In the bodies of the animals treated with phage the microbes and [illegible]

Card : 1/3

Country : USSR
Category: Virology. Bacterial Viruses (Phages)

Abs Jour: Ref Zhur-Biol., No 23, 1956, No 10[illegible]

lysis, and the number of them rises sharply. More active lysis is observed during the first few hours after administering the phage. However, the lysis of all the microbes after the administration of phage does not occur, and after four or five days their number again increases. In many cases the spleen is the only organ from which the administered phage can be isolated for a long time. Under the influence of the Vi-phage a considerable portion of the bacteria remaining alive change their antigenic structure and change over from the virulent V form to the avirulent W-form. The greatest percentage of changed cultures is found during the period of greatest phage concentration in the body. In mice in which O-phage has been

Card : 2/3

Country : USSR
Category: Virology. Bacterial Viruses (Phages)

Abs Jour: Ref Zhur-Biol., No 23, 1958, No 103[illegible]

used [illegible] the cultures remain in the V form. After [illegible] administration of a mixture of Vi- and O-phages cl[illegible] the effect of the Vi-phage is not l[illegible] Vi and O-phag[illegible] do not chan[illegible] their properties after entering the b[illegible] and under these conditions no [illegible] of phages ar[illegible] found. - [illegible] I. Rautenshteyn.

Card : 3/3

IL'INSKIY, B.V.; BORISOVA, L.I.; KARLOVA, N.P., KOMAROVA, I.N.; KRIVORUCHENKO, I.V.; PETROVA, N.P.

Characteristics of the biochemism of the blood in atherosclerosis. Trudy Inst. klin. i eksper. kard. AN Gruz. SSR 8:35-44 '63. (MIRA 17:7)

1. Iz III terapevticheskoy kafedry Gruzinskogo instituta dlya usovershenstvovaniya vrachey i gruppy po aterosklerozu Instituta fiziologii imeni Pavlova AN SSSR, Leningrad.

S/120/62/000/005/036/036
E075/E436

AUTHORS: Baroni, Ye.Ye., Petrova, N.P.

TITLE: Zone melting of organic compounds on a microscale

PERIODICAL: Pribory i tekhnika eksperimenta, no.5, 1962, 198-199

TEXT: Small quantities (1.0 to 1.5 g) of anthranilic acid, diphenyl, anthracene, o-nitrotoluene, p-bromophenol, benzophenone, succinic acid, adipic acid, p-bromoaniline, anthraquinone, thymol, acetanilide and p-anizidine were purified by zone melting in glass ampules 7 to 7.5 mm in diameter and 100 mm length. The ampules were 2/3 filled with the compounds and vacuum sealed. They were passed at the rate of 0.2 or 0.4 mm/min through a furnace consisting of four zones of heating (discs 12 mm thick) and three consecutively placed cooling zones (4 mm thick) separated from the heating zones with asbestos. The method was applied to prepare pure substances for the investigation of luminescent properties of additives in plastic scintillators. There is 1 figure.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN GruzSSR
(Physico-technical Institute AS Georgian SSR)

SUBMITTED: January 22, 1962

Card 1/1