

L 41720-65 EWT(m)/T  
ACCESSION NR: AP5010852

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AUTHORS: Vysotskiy, Z. Z.; Stralko, V. V.

TITLE: A method for obtaining silica gel. Class 12, No. 169499 ✓

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 7, 1965, 19

TOPIC TAGS: silica gel, organic compound, sorption ✓

ABSTRACT: This Author Certificate presents a method for obtaining silica gel modified with organic compounds in the course of drying raw gel. To obtain silica gel of a high sorbing ability, the drying of gel is conducted in the atmosphere of thiophene at a temperature of 20C and at atmospheric pressure.

ASSOCIATION: Institut fizicheskoy khimii im. L. V. Pisarshevskogo AN UkrSSR  
(Institute of Physical Chemistry, AN UkrSSR)

SUBMITTED: 28Mar64

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Card 1/1

L 54553-65 EWT(m)/EPF(c)/ÉPA(w)-2/T Pab-10/Pr-4 RWH/NW

ACCESSION NR: AP5016716

UR/0286/65/000/010/0017/0017 <sup>3/3</sup>

AUTHORS: Polyakov, M. V.; Vysotskiy, Z. Z.; Strelko, V. V.; Gushchin, P. P.

TITLE: A method for obtaining organosilica gel. <sup>7</sup> Class 12, No. 170914 15

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 10, 1965, 17

TOPIC TAGS: organosilica gel, silica gel, organic compound, ethanolamine

ABSTRACT: This Author Certificate presents a method for obtaining organosilica gel in the vapor of an organic compound. To obtain silicagel with molecular screen properties, the acidified hydrogel or xerogel of silicic acid is dried in the vapor of ethanolamine at a temperature of 20C over strong desiccants, at atmospheric pressure or in a vacuum.

ASSOCIATION: Institut fizicheskoy khimii im. L. V. Pisarzhevskogo AN UkrSSR  
(Institute of Physical Chemistry, AN UkrSSR)

SUBMITTED: 28Mar64

ENCL: 00

SUB CODE: GC

NO REF SOV: 000

OTHER: 000

Card 1/1R

STRELKOV, Anney

Intersexes in Tardigrada as a result of infection by Karyonida.  
Dokl. AN SSSR 158 no.3:745-748 S '64. (MIRA 17:10)

Leningradskiy gosudarstvennyy universitet im. A.A.Zhdanova. Predstavleno akademikom Ye. N.Pavlovskim.

STRELKOV, A.

Simplest automobile model. Voen.znan.31 no.4:17-19 Ap '55.  
(MLRA 8:10)

1. Nachal'nik avtomotokluba Dobrovol'nogo obshchestva so-  
deystviya armii, aviatsii i flotu, Khar'kov  
(Automobiles--Models)

NASONOV, Dmitriy Nikolayevich; TROSHIN, A.S., glav. red.; GOLOVINA, N.V., red.; POLYANSKIY, Yu.I., red.; ROZENTAL', D.L., red.; STRELKOV, A.A., red.; VASIL'YEVA, Z.A., red.izd-va; VINOGRADOVA, N.F., tekhn. red.

[Some problems of cell morphology and physiology] Nekotorye voprosy morfologii i fiziologii kletki; izbrannyye trudy. Moskva, Izd-vo AN SSSR, 1963. 361 p. (MIRA 16:12)  
(Cytology)

STRELKOV, Andrey

Biology of a new mermithid parasitizing in flies of Rybinsk Reservoir.  
Vest. LGU 19 no.3:55-69 '64. (MIRA 17:3)

STRELKOV, A. A.

"Large Practicum for Invertebrate Zoology," Vol. I, (Bk.)

YAKOVLEVA, A.M.; PAVLOVSKIY, Ye.N., akademik, glavnyy redaktor; STREIKOV,  
A.A., redaktor izdaniya; BORISOV, K.A., redaktor izdatel'stva;  
ARONS, R.A., tekhnicheskiiy redaktor.

[Loricata mollusks (Loricata) in the seas of the U.S.S.R.] Pan-  
tseyrnye molluski morei SSSR (Loricata) Moskva, Izd-vo Akad.  
nauk SSSR, 1977. 127 p. (Opredeliteli po faune SSSR, no.45).  
(MLRA 10:8)

1. Direktor Zoologicheskogo instituta AN SSSR (for Pavlovskiy).  
(Mollusca)



STRELKOV, A.A.

New species of pelagic infusorian Tintinnoinea in Far Eastern waters.  
Trudy Zool.inst. 13:57-69 '53. (MLRA 7:5)  
(Pacific Ocean--Infusoria) (Infusoria--Pacific Ocean)

DOGEL', Valentin Aleksandrovich; MEL'NIKOVA, G.G., redaktor; ~~STREL~~  
KOV, A.A., professor; VODOLAGINA, S.D., tekhnicheskiy redaktor.

[Reduction in the number of homologous organs as one of the main  
paths of evolution in animals] Oligomerizatsiia gomologicbnykh  
organov kak odin iz glavnykh putei evolintsii zhivotnykh. Lenin-  
grad, Izd-vo Leningradskogo universiteta, 1954. 367 p. [Microfilm]  
(Evolution) (Anatomy, Comparative) (MLRA 8:2)

ANDRIYASHEV, A.P.; PAVLOVSKIY, Ye.H., akademik, glavnyy redaktor;  
BYKHOVSKIY, B.Ye., redaktor; VINOGRADOV, B.S., redaktor; ~~STREL-~~  
KOV, A.A., redaktor; SHTAKEL'BERG, A.A., redaktor; SOSUNTSOVA, Ye.M.,  
redaktor; SMIRNOVA, A.V., tekhnicheskiy redaktor.

Fishes of the northern seas of the U.S.S.R. Opredeliteli po faune  
SSSR no.53:3-566 '54. (MLRA 7:11)

1. Direktor Zoologicheskogo instituta Akademii nauk SSSR (for Pav-  
lovskiy)  
(Fishes)

STRELKOV, A.A.

Valentin Aleksandrovich Dogel's 70th birthday. Trudy Len.ob-va  
est. 72 no.4:5-8 '54. (MIRA 8:11)  
(Dogel, Valentin Aleksandrovich, 1882-)

PESHKOV, M.A.; ZASUKHIN, D.N., redaktor; STRELKOV, A.A., redaktor; ARONS,  
R.A., tekhnicheskii redaktor.

[Cytology of bacteria] Tsitologiya bakterii. Moskva, Izd-vo  
Akademii nauk SSSR, 1955. 220 p. illus. (MLBA 8:12)  
(BACTERIA)

STRELKOV, A.A.

AKUMUSHKIN, I.I.; BARANOVA, Z.I.; BRODSKIY, K.A.; VIRKETIS, M.A.;  
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Ye S.; KOPYAKOVA, Z. I.; KOLTUN, V.M.; KONZHUKOVA, Ye.D.;  
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LOMLAKINA, N.B.; NAUMOV, D.V.; PERGAMENT, T.S.; RUSHETNYAK,  
V.V.; SAVEL'YEVA, T.S.; SKARLATO, O.A.; SOKOLOV, I.I.;  
STRELKOV, A.A.; TARASOV, N.I.; USHAKOV, P.V.; SHCHEDRINA, Z.G.  
YAKOVLEVA, A.M.; USHAKOV, P.V., obshchiy rukovoditel';  
PAVLOVSKIY, Ye.N., akademik, redaktor; STRELKOV, A.A. redaktor;  
BRODSKIY, K.A., redaktor; ARONS, R.A., tekhnicheskii redaktor.

[Atlas of invertebrates of the Far East seas of the U.S.S.R.]  
Atlas bespozvonochnykh dal'nevostochnykh morei SSSR. Moskva,  
Izd-vo Akad.nauk SSSR, 1955. 240 p., 66 plates. (MLRA 8:10)

1. Akademiya nauk SSSR. Zoologicheskiy institut,  
(Soviet Far East---Invertebrates)

SHMIDT, P.Yu.; KORZHUYEV, P.A., doktor biologicheskikh nauk, redaktor;  
STRILKOV, A.A., redaktor; SMIRNOVA, A.V., tekhnicheskii redaktor

[Anabiosis] Anabioz. 4-oe izd. Moskva, Izd-vo Akad. nauk SSSR,  
1955. 435 p. (MIRA 8:7)  
(Resuscitation)

ТЕЛЕНГА, А.А.

TELENGA, N.A.; PAVLOVSKIY, Ye.N., akademik, glavnyy redaktor; BYKHOVSKIY, B.Ye., redaktor; VINOGRADOV, B.S., redaktor; STRELKOV, A.A., redaktor; SHTAKEL'BERG, A.A., redaktor; BORKHEMIUS, N.S., redaktor; KRYZHANOVSKIY, O.L., redaktor; SMIRNOVA, A.V., tekhnicheskiy redaktor.

Hymenoptera; family Braconidae, subfamily Microgasterinae, subfamily Agathinae. Fauna SSSR 5 no.4:3-312 '55. (MIRA 8:5)

1. Direktor Zoologicheskogo Instituta Akademii nauk SSSR (for Pavlovskiy).  
(Hymenoptera)



USHAKOV, P.V.; PAVLOVSKIY, Ye.N., akademik, redaktor; BYKHOVSKIY, B.Ye.,  
redaktor; VINOGRADOV, B.S., redaktor; SPRELOV, A.A., redaktor;  
SHTAKEL'BERG, A.A., redaktor

Polychaeta of the Far Eastern seas of the U.S.S.R. Opr. po faune  
no. 56:3-4+3 '55. (MLRA 8:11)

1. Direktor Zoologicheskogo instituta Akademii nauk SSSR (for Pav-  
lovskiy)

(Soviet Far East--Polychaeta)

*fauna of the Far East*  
KOROTKEVICH, V.S.; PAVLOVSKIY, Ye.N., akademik, redaktor; BYKHOVSKIY, B.Ye.,  
redaktor; VINOGRADOV, B.S., redaktor; STRELKOV, A.A., redaktor; SHTAKEL'-  
BERG, A.A., redaktor

Pelagic nemertinea of the Far Eastern seas of the U.S.S.R. Opr.po  
faune no.58:3-131 '55. (MLRA 8:11)

1. Direktor Zoologicheskogo instituta Akademii nauk SSSR (for Pav-  
lovskiy)

(Soviet Far East--Nemertinea)

*Pavlovskiy, Ye.N.*  
PAVLOVSKIY, Ye.N., akademik, redaktor; BYKHOVSKIY, B.Ye., redaktor;  
VINOGRADOV, B.S., redaktor; STRELKOV, A.A.; SHTAKEL'BERG, A.A.,  
redaktor; BREGETOVA, N.G., redaktor; RADZIVILOVSKAYA, Z.A.,  
redaktor; SMIRNOVA, A.V., tekhnicheskiiy redaktor.

Mites of rodents in the U.S.S.R. Opr.po faune 59:3-458 '55.  
(MIRA 9:1)

1. Direktor Zoologicheskogo instituta AN SSSR (for Pavlovskiy)  
(Mites) (Rodentia--Diseases and pests)

STRELOV, H.H.

GALKIN, Yu.I.; PAVLOVSKIY, Ye.N., akademik, redaktor; BYKHOVSKIY, V.Ye.  
redaktor; VINOGRADOV, B.S., redaktor; STRELKOV, A.A., redaktor;  
SHTAKEL'BERG, A.A., redaktor; RADZIVILOVSKAYA, Z.A., redaktor;  
ARONS, R.A., tekhnicheskiy redaktor

Gasteropoda, Trochidae of the Far Eastern and northern seas  
of the U.S.S.R. Opr.po faune no.57:3-131 '55. (MLRA 8:7)

1. Direktor zoologicheskogo instituta AN SSSR (for Pavlovskiy)  
(Gasteropoda)

TALIYEV, Dmitriy Nikolayevich, 1908-1952; NALIVKIN, D.V., akademik,  
redaktor; SPHELKOV, A.A., professor, redaktor; PEVZNER, R.S.,  
tekhnicheskiy redaktor.

[Cottoid fishes of Lake Baikal (Cottoidei)] Bychki-podkamenshchiki  
Baikala (Cottoidei). Moskva, Izd-vo Akademii nauk SSSR, 1955. 602 p.  
(Baikal, Lake--Fishes) (MLRA 8:12)

AKUMUSHKIN, I.I.; BARANOVA, Z.I.; BRODSKIY, K.A.; VIRKETS, M.A.;  
VOLODCHENKO, N.I.; GALKIN, Yu.I.; GUR'YANOVA, Ye.F.; DOGEL'  
V.A.; D'YAKONOV, A.M.; ZEVINA, G.B.; IVALOV, A.V.; KIR'YANOVA,  
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V.V.; SAVEL'YEVA, T.S.; SKARLATO, O.A.; SOKOLOV, I.I.;  
STRELKOV, A.A.; TARASOV, N.I.; USHAKOV, P.V.; SHCHEDRINA, Z.G.  
YAKOVLEVA, A.M.; USHAKOV, P.V., obshchiy rukovoditel';  
PAVLOVSKIY, Ye.N., akademik, redaktor; STRELKOV, A.A. redaktor;  
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[Atlas of invertebrates of the Far East seas of the U.S.S.R.]  
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Izd-vo Akad.nauk SSSR, 1955. 240 p., 66 plates. (MLRA 8:10)

1. Akademiya nauk SSSR. Zoologicheskii institut,  
(Soviet Far East--Invertebrates)

GUTSEVICH, A.V.; PAVLOVSKIY, Ye.N., akademik, glavnyy redaktor; IVANOV, A.I., redaktor; KRYZHANOVSKIY, O.L., redaktor; MONCHADSKIY, A.S., redaktor; STRIKOV, A.A., redaktor; SHTAKEL'BERG, A.A., redaktor vypuska; KOZLOVA, G.I., redaktor izdatel'stva; TVERITINOVA, K.S., tekhnicheskii redaktor

[Biting midges; bloodsucking Diptera of the Heleidae family] Mokretsy, krovososushchie dvukrylye semeistva Heleidae. Moskva, Izd-vo Akademii nauk SSSR, 1956. 50 p. (V pomoshch' rabotaiushchim po zoologii v pole i laboratorii, 3) (MIRA 9:9)  
(Diptera)

RUBTSOV, I.A.; PAVLOVSKIY, Ye.N., akademik, glavnyy redaktor; IVANOV, A.I., redaktor; KRYZHANOVSKIY, O.L., redaktor; MONCHADSKIY, A.S., redaktor; STRELKOV, A.A., redaktor; SHTAKEL'BERG, A.A., redaktor; TVERTINOVA, K.S., tekhnicheskii redaktor

[Methods of studying black flies] Metody izucheniia moshek. Moskva, Izd-vo Akademii nauk SSSR, 1956. 54 p. (V pomoshch' rabotaiushchim po zoologii v pole i v laboratorii, 4) (MLRA 9:10)  
(Black flies)



VYSOTSKAYA, S.O.; PAVLOVSKIY, Ye.N., akademik, radaktor; BYKHOVSKIY,  
B.Ye., radaktor; VINOGRADOV, B.S., radaktor; ~~STRELKOV, A.A.~~ redak-  
tor; SHTAKEL'BERG, A.A., radaktor; DUBININ, V.B., radaktor;  
ZENDEL', R.Ye., tekhnicheskij radaktor.

[Short guide to fleas having an epidemiological significance]  
Kratkii opredelitel' blokh, imeiushchikh epidemicheskoe znachenie.  
Moskva, Izd-vo Akademii nauk SSSR, 1956. 99 p. (Opredeliteli po  
faune SSSR, no.63) (MLRA 9:8)

(Fleas as carriers of disease)

871111111, V. A.

VINOGRADOV, B.S.; GROMOV, I.M.; PAVLOVSKIY, Ye.N., akad. IVANOV, A.I., redaktor;  
KRYZHANOVSKIY, O.L., redaktor; MONCHADSKIY, A.S., redaktor; STRIL-  
KOV, A.A., redaktor; KOZLOVA, G.I., redaktor; KRUGLIKOVA, N.A.,  
tekhnicheskii redaktor

[Concise guide to the rodents of the U.S.S.R.] Kratkii opre-  
delitel' gryzunov fauny SSSR, Moskva, Izd-vo Akademii nauk SSSR,  
1956. 118 p. (V pomoshch' rabotaiushchim po zoologii v pole i  
laboratorii, no.1) (MLRA 9:2)

1. Direktor Zoologicheskogo instituta AN SSSR, (for Pavlovskiy).  
(Rodentia)

SHTAKEL'BERG, A.A.; PAVLOVSKIY, Ye.N., akademik, redaktor; BYKHOVSKIY, B.Ye., redaktor; VINOGRADOV, B.S., redaktor; STRELKOV, A.A.; redaktor; SMIRNOV, A.V., tekhnicheskiy redaktor.

[Synanthropic diptera of the U.S.S.R.] Sinantropnye dvukrylye fauny SSSR. (Opredeliteli po faune SSSR no.60) 1956 163 p. (MLRA 9:4)

1. Direktor Zoologicheskogo instituta AN SSSR (for Pavlovskiy)  
(Diptera)

KOZAK, B.A.; MUSATOV, I.G.; PEROVICH, I.N.; SHAFRANOVSKIY, K.I.; STRELKOV, A.A., redaktor; ISAKOVA, O.V., otvetstvennyy redaktor; LIKHTENSHTAYN, Ye.S., otvetstvennyy redaktor; SHUNKOV, V.I., otvetstvennyy redaktor; NESMEYANOV, A.N., akademik, glavnyy redaktor; TOPCHIYEV, A.V., akademik, zamestitel' glavnogo redaktora; RUDENSKAYA, L.V., redaktor izdatel'stva; NOVIKOVA, S.I., tekhnicheskiy redaktor

Evgenii Nikanorovich Pavlovskii. Izd. 2-oe, ispr. i dop. Pod red. A.A.Strelkova. Bibl. sost. E.A.Kozak i dr. Moskva, 1956. 239 p. (Materialy k biobibliografii uchenykh SSSR. Seriya biologicheskikh nauk. Parazitologiya, no.1) (MLRA 9:12)

1. Akademiya nauk SSSR.

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Л. А. Рубцов  
RUBTSOV, I.A.; PAVLOVSKIY, Ye.N., akademik, glavnyy redaktor; BYKHOVSKIY,  
B.Ye.N., redaktor; VINOGRADOV, B.S., redaktor; SHTAKEL'BERG, A.A.,  
redaktor; STRELKOV, A.A., redaktor toma.

[Black flies (fam. Simuliidae)] Moshki (sen. Simuliidae). Moskva,  
Izd-vo Akademi nauk SSSR, 1956. 859 p. (Fauna SSSR, vol.6, no.6)  
(Black flies) (MLRA 9:12)

STRELKOV, A.A.; KOZAK, E.A.

"Bibliography on the geography of Iran." M.P. Petrov. Reviewed  
by A.A. Strelkov, E.A. Kozak. Izv.AN Turk.SSR no.1:84-85 '56.  
(MLBA 9:8)

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(Petrov, Mikhail Platonovich, 1906-)

DUBININ, V.B.; PAVLOVSKIY, Ye.N., akademik, glavnyy redaktor; BYKHOVSKIY, B.Ye., redaktor; VINOGRADOV, B.S., redaktor; SHTAKEL'BERG, A.A., redaktor; ~~STREIKOV, A.A.~~, redaktor; ZENDEL', R.Ye., tekhnicheskiy redaktor.

[Feather mites (Analgesoidea)]. Per'evye kleshchi (Analgesoidea). Pt.3: [Family Pterolichidae]. Semeistvo Pterolichidae. Moskva, Izd-vo Akademii nauk SSSR, 1956. 813 p. (Fauna SSSR vol.6, no.7). (MLRA 10:6)

1. Direktor Zoologicheskogo instituta AN SSSR (for Pavlovskiy).  
(Mites) (Parasites--Birds)

SERDYUKOVA, G.V.; PAVLOVSKIY, Ye.N., akademik, glavnyy redaktor; BYKHOVSKIY, B.Ye., redaktor; VINOGRADOV, B.S., redaktor; ~~STRELKOV, A.A., redaktor~~; SHTAKEL'-BERG, A.A., redaktor.; BLAGOVESHCHESNKIY, D.I., redaktor izdaniya; KOZLOVA, G.I., redaktor izdatel'stva; KRUGLIKOVA, N.A., tekhnicheskiy redaktor.

[Ixodid ticks of the U.S.S.R.] Iksodovye kleshchi fauny SSSR. Moskva, Izd-vo Akademii nauk SSSR, 1956. 121 p. (Opredeliteli po faune SSSR, no.64) (MIRA 10:3)

1. Direktor Zoologicheskogo insituta AN SSSR (for Pavlovskiy).  
(Ticks)



BREGETOVA, N.G.; PAVLOVSKIY, Ye.N., akademik, redaktor; BYKHOVSKIY, B.Ye., redaktor; VINOGRADOV B.S., redaktor; STRELKOV, A.A., redaktor; SHTAKEL'BERG, A.A., redaktor; MONCHADSKIY, A.S., redaktor; ZENDEL', M.Ye., tekhnicheskii redaktor.

[Gamasid mites (Gamasoidea); short guide] Gamazovye kleshchi (Gamasoidea); kratkii opredelitel'. Moskva, Izd-vo Akademii nauk SSSR, 1956. 246 p. (Opredeliteli po faune SSSR, no.61) (MLRA 9:8)

1. Direktor zoologicheskogo instituta AN SSSR (for Pavlovskiy)  
(Mites)

NOVIKOV, G.A.; PAVLOVSKIY, Ye.N., akademik, redaktor; BYKHOVSKIY, B.Ye., redaktor; VINOGRADOV, B.S., rdaktor; STRELKOV, A.A., redaktor; SHTAKEL'BERG, A.A., redaktor; KOZLOVA, G.I., redaktor; SMIRNOVA, A.V., tekhnicheskij redaktor.

[Carnivorous mammals of the U.S.S.R.] Khishchnye mlekopitaiushchie fauny SSSR. Moskva, Izd-vo Akademii nauk SSSR, 1956. 293 p.  
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1. Direktor zoologicheskogo instituta AN SSSR (for Pavlovskiy)  
(Carnivora)

TARASOV, N.I.; ZEVINA, G.B.; PAVLOVSKIY, Ye.N., akademik, glavnyy red.;  
BYKHOVSKIY, B.Ye., red.; VINOGRADOV, B.S., red.; SHTAKEL'BERG, A.A.,  
red.; STRELKOV, A.A., red.; SERGHEYVA, G.I., red. izd-va; SMIRNOVA,  
A.V., tekhn. red.

[Barnacles (Cirripedia thoracica) in the seas of the U.S.S.R.] Us-  
nogie raki (Cirripedia thoracica) morei SSSR. Moskva, Izd-vo akad.  
nauk SSSR, 1957. 263 p. (Fauna SSSR, no.69). (MIRA 11:3)

1. Direktor Zoologicheskogo instituta AN SSSR (for Pavlovskiy).  
(Cirripedia)

LUK'YANOVICH, F.K.; TER-MINASYAN, M.Ye.; PAVLOVSKIY, Ye.N., akademik,  
glavnyy redaktor; BYKHOVSKIY, B.Ye., redaktor; VINOGRADOV, B.S.,  
redaktor; STRELKOV, A.A., redaktor; SHTAKEL'BERG, A.A., redaktor;  
TVERITINOVA, K.S., tekhnicheskiy redaktor.

[Grain beetles (Bruchidae).] Zhuki-zernovki (Bruchidae). Moskva,  
Izd-vo Akad. nauk SSSR, 1957. 208 p. (Fauna SSSR, no.67, Zhestko-  
krylye, vol. 24, no.1). (MLA 10:7)

(Beetles)

5. 10. 1957  
PAVLOVSKIY, Ye.N., akademik; IVANOV, A.I., redaktor; KRYZHANOVSKIY, O.L.,  
redaktor; MONCHADSKIY, A.S., redaktor; STRELKOV, A.A., redaktor  
vypuska

[Methods of anatomizing insects by hand] Metody ruchnogo  
anatomirovaniia nasekomykh. Moskva, Izd-vo Akad.nauk SSSR, 1957.  
80 p. (V pomoshch' rabotaiushchim po zoologii v pole i laboratorii, 6)  
(MLRA 10:6)

(Insects--Collection and preservation)

STRELKOV  
KOZLOVA, Ye.V.; PAVLOVSKIY, Ye.N., akademik, glavnyy redaktor; BYKHOVSKIY, B.Ye., redaktor; VINOGRADOV, B.S., redaktor; STRELKOV, A.A., redaktor; SHTAKEL'-BERG, A.A., redaktor; IVANOV, A.I., redaktor; KOZLOVA, G.I., redaktor izdatel'stva; SMIRNOVA, A.V., tekhnicheskiiy redaktor.

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1. Direktor Zoologicheskogo instituta AN SSSR (for Pavlovskiy)  
(Auks)

*SECRET*  
BULYCHEVA, A.I.; PAVLOVSKIY, Ye.N., akademik, glavnyy redaktor; BYKHOVSKIY, B.Ye., redaktor; VINGRADOV, B.S., redaktor; ~~STRELKOV, A.A.~~, redaktor; SHTAKEL'BERG, A.A., redaktor izdaniya; KRUGLIKOVA, N.A., tekhnicheskii redaktor

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BYKHOVSKIY, B.Ye.; PAVLOVSKIY, Ye.N., akademik, glavnyy redaktor; STRELKOV, A.A.,  
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A.A.

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PAVIL'SHCHIKOV, Nikolay Nikolayevich; PAVLOVSKIY, Ya.N., akademik,  
glavnyy red.; BYKHOVSKIY, B.Ye., red.; VINOGRADOV, B.S., red.;  
STRELKOV, A.A., red.; SHTAKEL'BERG, A.A., red.serii; KRYZHANOV-  
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(Longicorn beetles)

LINDBERG, G.U.; LEGEZA, M.I.; PAVLOVSKIY, Ye.N., akad., glavnyy red.;  
BYKHOVSKIY, B.Ye., red.; VINOGRADOV, B.S. [deceased], red.;  
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DOGEL', Valentin Aleksandrovich, prof. [deceased]; IVANOV, A.V., prof.,  
red.; POLYANSKIY, Yu.I., prof., red.; STRELKOV, A.A., prof.,  
red.; LIOZNER, L.D., red.; SIDOROVA, V.I., red.izd-va; PAVLOVA,  
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GUTSEVICH, Aleksandr Vasil'yevich; PAVLOVSKIY, Ye.N., akademik, glavnyy  
red.; BYKHOVSKIY, B.Ye., red.; STRELKOV, A.A., red.;  
SHTAKEL'BERG, A.A., red.vypuska; KRUGLIKOVA, N.A., tekhn.red.

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BORKHSENIUS, Nikolay Sergeevich; PAVLOVSKIY, Ye.N., akademik, glavnyy red.;  
BYKHOVSKIY, B.Ye., red.; STRELKOV, A.A., Red.; SHTAKEL'BERG,  
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STRELKOV, A.A., red.; BYKHOVSKIY, B.Ye., red.; GROMOV, I.N., red.;  
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PAVLOVSKIY, Ye.P., akad., glav. red.; STRELKOV, A.A., red. izd.; YUR'YEV, K.B.,  
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TOMLIN, Avenir Grigor'yevich, prof.; PAVLOVSKIY, Ye.N., akademik, glavnyy red.; CHAPSKIY, K.K., red.; BYKHOVSKIY, B.Ye., red.; GROMOV, I.M., red.; MONCHADSKIY, A.S., red.; SKARLATO, O.A., red.; STRELKOV, A.A., red.; SHTAKEL'BERG, A.A., red.; MAKAROV, B.M., red. izd-va; ROMANOV, G.M., tekhn.red.; NOVICHKOVA, N.D., tekhn.red.

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KOZLOVA, Yelizaveta Vladimirovna; PAVLOVSKIY, Ye.N., akademik, glavnyy red.;  
**IVANOV**, A.I., red.toma; BYKHOVSKIY, B.Ye., red.; GROMOV, I.M., red.;  
MONCHADSKIY, A.S., red.; SKARLATO, O.A., red.; STRELKOV, A.A., red.;  
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STRELKOV, A.A., prof., red. izdaniya; BYKHOVSKIY, B.Ye., red.;  
GROMOV, I.M., red., red.; MONCHADSKIY, A.S., red.; SKARLATO, O.A.,  
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KLYUGE, German Avgustovich [deceased]; PAVLOVSKIY, Yo.N., akademik, glav. red.;  
STRELKOV, A.A., prof., red. toma; BYKHOVSKIY, B.Ye., red.;  
GROMOV, I.M., red.; MONCHADSKIY, A.S., red.; SKARLATO, O.A., red.;  
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RUBTSOV, Ivan Antonovich; PAVLOVSKIY, Ye.N., akademik, glavnyy red.;  
STEELKOV, A.A., red.toma; BYKHOVSKIY, B.Ye., red.; GROMOV, I.M.,  
red.; MONCHADSKIY, A.S., red.; SKARLATO, O.A., red.; SHTAKEL'BERG,  
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GRUNIN, Konstantin Yakovlevich; PAVLOVSKIY, Ye.N., akademik, glavnyy red.;  
SHTAKEL'BERG, A.A., prof., red.; BYKHOVSKIY, B.Ye., red; GROMOV,  
I.M., red.; MONCHADSKIY, A.S., red.; SKARLATO, O.A., red.;  
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LIKHAREV, Il'ya Mikhaylovich; PAVLOVSKIY, Ye.N., akademik, glavnyy red.;  
STRELKOV, A.A., red.toma; BYKHOVSKIY, B.Ye., red.; GROMOV, I.M.;  
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CHEKANOVSKAYA, Ol'ga Vitol'dovna; PAVLOVSKIY, Ye.N., akademik, glavnyy red.;  
STRELKOV, A.A., red.toma; BYKHOVSKIY, B.Ye., red.;  
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GOLIKOV, Aleksandr Nikolayevich; PAVLOVSKIY, Ye.N., akademik, glavnyy red.;  
STRELKOV, A.A., red.toma; BYKHOVSKIY, B.Ye., red.; GROMOV, I.M., red.;  
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BORKHSENIUS, Nikolay Sergeyeovich; PAVLOVSKIY, Ye.N., akademik, glavnyy red.;  
STRELKOV, A.A., otv. red.; BYKHOVSKIY, B.Ya., red.; MONCHADSKIY,  
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STRELKOV, A.A., red.toma; BYKHOVSKIY, B.Ye., red.; GROMOV, I.M.,  
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BYKHOVSKIY, B.Ye., akademik, red.; GROMOV, I.M., red.;  
MOCHADSKIY, A.S., red.; SKARLATO, O.A., red.; STRELKOV,  
A.A., prof., red.; SHTAKEL'BERG, A.A., red.

[Moths and pyralids attacking grain and foodstuffs] Moli  
i ognevki - vrediteli zerna i prodovol'stvennykh zapasov.  
Moskva, Nauka, 1965. 270 p. (MIRA 19:1)



STANLEY, S. J., 1950

Urea-ammonium nitrate as fertilizer. *Zentralblatt für Bakteriologie* 43: 1-10.  
(NITR. 12:1)

(Ammonium hydride) (Field crops--Fertilizers and manures)

SAKS, V.N. and STRELKOV, A.S.

"Mesozoic and Cenozoic of the Soviet Arctic."

report presented at the First International Symposium on Arctic Geology, Calgary, Canada,  
11-13 Jan 1960.

22877

S/089/61/010/005/005/015  
B102/B214

26. 2246

AUTHORS: Leypunskiy, O. I., Strelkov, A. S., Frolov, A. S.,  
Chentsov, N. N.

TITLE: The propagation of the  $\gamma$ -radiation of a prompt point source  
in air

PERIODICAL: Atomnaya energiya, v. 10, no. 5, 1961, 493-500

TEXT: The present paper gives a calculation of the propagation of an infinitely short gamma radiation pulse ( $\delta$  pulse) in air space considered as infinite. The calculation is made by the Monte-Carlo method. The initial gamma radiation energy is assumed to be 1 Mev and the density of air to be  $1.29 \cdot 10^{-3}$  g/cm<sup>3</sup>. The point source considered emits isotropically. The direction of motion of one of the quanta emitted by the source and suffering collision is described by the Klein Nishina indicatrix. A special method is developed for the solution of the transcendental equation obtained. The absorption of the quanta is taken into account by a weight factor. A quantum packet thus moves along a trajectory; each trajectory is followed till the weight is only just  $10^{-4}$  times the initial weight. X

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S/089/61/010/005/005/015  
B102/B214

The propagation of the  $\gamma$ -radiation of a...

The object of the calculations is to determine the quantity  $\Phi_{kjim}$  i.e. the energy transferred at a distance  $R_k$  from the source in the time  $t_j - t_{j+1}$  through a unit area perpendicular to the flux by gamma quanta of energy  $E_i - E_{i+1}$  whose directions of motion make an angle  $\theta_m - \theta_{m+1}$  with the radius vector of the point of observation. The intensities  $I_{kjim}^0 = \Phi_{kjim} / \Delta t_j \Delta E_i \Delta \Omega_m$  can be determined from  $\Phi_{kjim}$ . The following numerical values are taken as the basis of the calculations: 1)  $R_k = 250, 500, \text{ and } 1000 \text{ m}$  corresponding to  $\mu_0 R_k = 2.03, 4.08, \text{ and } 8.12$  free paths; 2)  $t_j = 0, 0.125, 0.250, 0.500, 1.00, 1.50, 2.00, 3.00, 4.00, \infty \mu\text{sec}$ ; 3)  $E_i = 0, 0.0625, 0.125, 0.250, 0.500, 1.00 \text{ and } 2.00 \text{ Mev}$ ; 4)  $\theta_m = 0, 10, 40, 90, 180^\circ$ . The applicability of the method was checked by comparison of the build-up factors obtained by integration of  $I_{kjim}^0$ . The result is

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The propagation of the  $\gamma$ -radiation of a...

S/089/61/010/005/005/015  
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$R_k, m (\mu_o R_k)$	250 (2.03)	500 (4.06)	1000 (8.12)
Monte-Carlo method	3.69	7.57	21.6
method Ref. 6	3.6	7.5	18.6

(Ref. 6: H. Goldstein, J. Wilkins. Rept. U. S. Atomic Energy Comm., No. 40, 3075 (1955)). The investigation of the time dependence of the pulse of the gamma source (scattered quanta) for observation points at different distances showed that the pulse became broader with increasing distance. The duration of the decrease of energy amounts to 0.5, 1.0, and 1.5  $\mu$ sec, respectively, for  $R = 250, 500,$  and  $1000 m$ . The unit of intensity is taken to be the intensity during  $0 - 0.125 \mu$ sec. The absolute values of the intensity in this interval over the whole spherical surface for these three  $R$  values are 1.43, 0.41, and 0.0088  $Mev/\mu$ sec, respectively. The investigation of the time energy spectra for different distances showed that for a given time interval at  $R > 250 m$  the form of the spectra remain practically unchanged. The investigation of the time dependence of the energy for different  $R$  values showed that for  $t > 1-1.5 \mu$ sec the mean hardness of the radiation remains practically unchanged (50-60 kev). From

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The propagation of the  $\gamma$ -radiation of a... S/089/61/010/005/005/015  
B102/B214

a comparison of the  $I(t)$  curves in given solid angles for different  $R$  values it is found that the decrease of intensity at  $\theta < 90^\circ$  is delayed with increasing distance. With increasing  $t$  and  $\theta$  and a given  $R_k$  the spectra become softer. Table 2 gives the numerical data for the angle distribution of the scattered gamma radiation; Table 3 gives the same for the total intensity. An estimate of the accuracy of the calculation of the time dependence of the intensities gives for  $t = 1 \mu\text{sec}$  15-20 %, and for  $t > 1 \mu\text{sec}$  40-50 %. For the time dependence of the energies the situation is analogous. The authors thank I. M. Gel'fand for collaboration. There are 6 figures, 3 tables and 8 references: 6 Soviet-bloc and 2 non-Soviet-bloc. X

SUBMITTED: July 7, 1961

Legend to the Tables: 1)  $\theta$  in degrees, 2)  $R$  in meters; the intensities are given in %.

Card 4/5

L 26726-66 EWT(1)/EVA(h)

ACC NR: AP6013511

SOURCE CODE: UR/0120/66/000/002/0119/0123

AUTHOR: Andryushin, N. F.; Antonov, Ye. A.; Bulatov, B. P.; Koridalin, V. Ye.; Strelkov, A. S.

42  
41  
B

ORG: Institute of Physics of the Earth AN SSSR, Moscow (Institut fiziki Zemli AN SSSR)

TITLE: A wide-range detector of light pulses 5

SOURCE: Pribory i tekhnika eksperimenta, no. 2, 1966, 119-123

TOPIC TAGS: light pulse, radiation detector, photomultiplier

ABSTRACT: A wide-range device for detecting intermittent light pulses is described. The basic element of the unit is a photomultiplier with alloyed dynodes. The output voltage pulses are taken from load resistors connected in the dynode circuits and fed to the measurement system. With the proper supply voltage and a slight correction in the voltage distribution between dynodes, there is a difference of an order of magnitude between the sensitivities of two adjacent dynodes. A detector with a linear dynamic range covering four orders of magnitude in the intensity of light pulses was made by taking the signals from four dynodes. Various types of photomultipliers were studied by modulator control of the photocurrent and by exposing the photocathode to short bursts of light. The experimental conditions and procedure are briefly described. The photomultipliers used were the FEU-13, -15 and -16 with alloyed dynodes and the

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UDC: 621.383.5:535.5

2

L 26726-66

ACC NR: AP6013511

FEU-27 and -31 with antimony-cesium coated dynodes. Both methods were used for studying the miniature FEU-15. Typical dynode output curves for this tube are given. The dynodes have a linear output range of more than 6-8 v with a 5% deviation from linearity. Formulas are given for determining signal magnitude in the linear region of the output curve for a given measurement rank, as well as for finding the sensitivity of any rank. The linearity of the dynode characteristics was studied with a direct-current component through the photomultiplier. It was found that the voltage across the dynode gap decreases as the gap approaches the anode. There is a simultaneous increase in the voltages across the dynode gaps closest to the photocathode since the total voltage across the photomultiplier remains constant. This is due to the initial increase in signal magnitude. A further increase in the anode current reduces the pulse amplitude from the dynode as a result of current limiting in the subsequent dynode gap due to the space charge. Thus there is a reduction in the difference between pulse currents in the preceding and succeeding dynode gaps. The sign of this difference may change when the anode current reaches a high enough value, with a resultant change in the polarity of the signal from the dynode. It is found that the direct current through the photomultiplier should be much less than the divider current for normal operation of the device. The authors are grateful to V. S. Yuzgin for participation in this work. Orig. art. has: 8 figures, and 2 formulas. [14]

SUB CODE: 20/

SUBM DATE: 11Mar65/

ORIG REF: 003/

ATD PRESS: 4256

Card 2/2 *FV*



ALFIMENKOV, V.P.; OSTANEVICH, Yu.M.; RUSKOV, T.; STRELKOV, A.V.;  
SHAPIRO, F.; YAN' U-GUAN [Yen Wu-kuang]

[Observation of the Mossbauer effect in  $\text{Sm}^{149}$ ] Nabludeniye ef-  
fekta Messbauera  $\text{Sm}^{149}$ . Dubna, Ob"edinennyi in-t iadernykh issl.,  
1961. 6 p. (MIRA 15:1)  
(Nuclear magnetic resonance and relaxation) (Samarium)

ALFIMENKOV, V.P.; OSTANEVICH, Yu.M.; RUSKOV, T.; STRELKOV, A.V.;  
SHAPIRO, F.; YAN' U-GUAN [Yen Wu-kuang]

[Energy spectrum of the resonance absorption of  $\gamma$ -radiation  
from 92 Kev.  $Zn^{67}$  in zinc oxide] Energeticheskij spektr rezonan-  
snogo pogloshcheniia  $\gamma$ -islucheniia 92 Kev  $Zn^{67}$  v okisi tsinka.  
Dubna, Ob"edinennyi in-t iadernykh issl., 1961. 16 p.  
(MIRA 15:1)

(Gamma rays)

(Zinc oxide)

2

S/056/62/042/004/018/037  
B108/B102

AUTHORS: Alfimenkov, V. P., Ostanevich, Yu. M., Ruskov, T.,  
Strelkov, A. V., Shapiro, F. L., Yen Wu-kuang

TITLE: Energy spectrum of the resonance absorption in zinc oxide  
of 92-kev gamma radiation from Zn<sup>67</sup>

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki,  
v. 42, no. 4, 1962, 1029 - 1035

TEXT: The Mössbauer effect in Zn<sup>67</sup> has been studied by the Doppler shift and frequency modulation methods. The energy spectrum of 92-kev gamma rays was recorded at ~4.2°K using a source and a filter (up to 33% Zn<sup>67</sup>), both made of ZnO. The statistical error in the measurements was 2·10<sup>-4</sup>. Resonance absorption, observed at zero energy shift, reached a maximum of 2·10<sup>-3</sup>. The line width was somewhat greater than the natural width. The structure of the resonance-absorption energy spectrum shows quadruple splitting of the

Card 1/1 2

2

Energy spectrum of ...

S/056/62/042/004/018/037  
B108/B102

the Zn<sup>67</sup> levels but is difficult to interpret because of the insufficient experimental accuracy. The effective Debye temperature of the ZnO was estimated at about 300°K, which is consistent with published data. There are 6 figures and 10 references: 4 Soviet and 6 non-Soviet. The four most recent English-language references read as follows: R. V. Pound, G. A. Rebka, Phys. Rev. Lett., 4, 274; 397, 1960; R. Craig et al. Phys. Rev. Lett., 4, 561, 1960; S. Ruby, D. Bolef. Phys. Rev. Lett., 5, 5, 1960. ✓

ASSOCIATION: Ob"yedinennyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research)

SUBMITTED: December 9, 1961

Card 2/B 2

S/056/62/042/004/019/037  
E108/B102

AUTHORS: Alfimenkov, V. P., Ostonevich, Yu. M., Ruskov, T.,  
Strelkov, A. V., Shapiro, F. L., Yen Wu-kuang

TITLE: The Mössbauer effect in  $\text{Sm}_2^{149}\text{O}_3$

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki,  
v. 42, no. 4, 1962, 1036 - 1037

TEXT: A 22-kev gamma transition in  $\text{Sm}^{149}$  has been observed by  
B. S. Dzhelepov et al. (B. S. Dzhelepov et al. Nucl. Phys., 30, 110, 1962).  
To verify these authors' suggestion that this transition leads to the  
ground state, the present authors made nuclear resonance absorption, thus  
using an  $\text{Sm}_2\text{O}_3 + \text{Eu}_2^{149}\text{O}_3$  source and a movable  $\text{Sm}_2\text{O}_3$  filter and measuring  
at room temperature by the Doppler shift method. The results were positive.  
The upper limit of the level width was  $6 \cdot 10^{-7}$  ev, level lifetime  $\tau \rightarrow 10^{-9}$   
sec. K. Ya. Gromov, Zh. T. Zhelev, and V. A. Khalkin are thanked for having  
supplied the source. There are 2 figures and 2 non-Soviet references.

Card 1/2

The Mössbauer effect ...

S/056/62/042/004/019/037  
B108/B102

ASSOCIATION: Ob"yedinennyy institut yadernykh issledovaniy (Joint Institute  
of Nuclear Research)

SUBMITTED: December 9, 1961

Card 2/2

ACCESSION NR: AP4019209

S/0056/64/046/002/0482/0487

AUTHORS: Alfimenkov, V. P.; Lebedev, N. A.; Ostanevich, Yu. M.;  
Ruskov, T.; Strelkov, A. V.

TITLE: A study of the Mossbauer effect on Sm-149

SOURCE: Zhurnal eksper. i teor. fiz., v. 46, no. 2, 1964, 482-487

TOPIC TAGS: Mossbauer effect, samarium 149, Gamma spectrum, apparatus Gamma spectrum, velocity spectrum, apparatus velocity spectrum, line width, line broadening, resonance absorption, resonance emission, resonance absorption spectrum, level spin

ABSTRACT: To increase the number of Mossbauer  $\gamma$  transitions suitable for research, the authors investigated the 22.5-keV  $\gamma$  transition of Sm<sup>149</sup> in the form of Sm<sub>2</sub>O<sub>3</sub> with approximate activity  $5 \times 10^4$  quanta/sec.. The apparatus is described, together with the steps ta-

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ACCESSION NR: AP4019209

ken to eliminate the effect of the neighboring 41-keV gamma radiation of samarium. A line width of  $(1.35 \pm 0.1) \times 10^{-7}$  was obtained at room temperature, corresponding to a broadening by a factor of 2.3.

A cross section of  $(8.4 \pm 2.5) \times 10^4$  barns was obtained. The most likely spin of the 22.5-keV level is 5/2. It is claimed that the availability of more active sources and further development of the experimental technique will make the Mossbauer effect on  $\text{Sm}^{149}$  a useful research tool. "In conclusion the authors are grateful to F. Shapiro for continuous interest in the work, Zh. Zhelev for useful discussions, V. Grigalis, Z. Marish, Ye. Pikel'ner, S. Salakhidinov, and A. Sekirin for help with the measurements, and A. Novgorodov for help in preparing the source." Orig. art. has: 5 figures and 5 formulas.

ASSOCIATION: Ob"yedinenny\*y institut yaderny\*kh issledovaniy  
(Joint Institute of Nuclear Research)

Card 2/72 Sub: 24 Jul 63



STRELKOV, B. I.

PLANE I BOOK EXPLANATION SC7/407

Abel'skiy nauk SSSR. Institut avtomatiki i telemekhaniki  
Avtomaticheskoye upravleniye [obornok nabol] (Automatic Control) Collected  
Works [Kolektsiya] Izdano MZ SSSR [1960] 231 p. Series slip inserted. 5,500  
copies printed.

Ed. Izd. Topchiev, Doctor of Technical Sciences, Professor; Ed. of Publishing  
House: Izd. Ginzburg; Izd. Muz. G.A. Akhmed'eva.

Purpose: This collection of reports is intended for scientists and engineers  
engaged in the study of automation.

Content: The collection contains reports presented at the 6th Conference of  
Young Scientists of the Institute of Automatics and Telemekhanika (Izdatel'stvo  
Mekhanicheskoye i Avtomaticheskoye Upravleniye) in January  
1959. The collection covers a wide range of scientific and technical problems  
connected with automatic control. The personalities are mentioned. References  
accompany each report.

Shalimov, A.M., and I.I. Chervinskiy. Memorandum Pneumatic Pressure Ap-  
plications 23

The authors discuss the design and position of elements which permit  
a new solution of problems connected with designing pneumatic computers  
and control systems. These elements shall be free of some of the defects  
characteristic of existing pneumatic relays: equipped with rubber and  
fabric-welded membranes. There are no references.

Shalimov, V.K. Generator for Frequency-Independent Systems with an Asym-  
metrical Power Supply 229

The author discusses existing symmetrical telemechanical systems with time  
element separation which use an asymmetrical power supply into two groups:  
(1) those which require a selected (time or frequency) commutation char-  
acteristic for generating and synchronizing; (2) those which use synchronous  
commutation for generating and synchronizing. The author discusses the  
possibility of using an asymmetrical power supply in the design of frequency-  
independent systems. The time element is also used for synchronization and separating for which  
there are two possible variants. In the first variant the given generator  
starts and runs normally only in the beginning of each alternate cycle  
of exchange of information between dispatching and checking points. This  
is achieved by sending a special triggering pulse from the dispatching  
point and by sending, during transmission, synchronizing pulses at equal  
intervals which are common multiples of the oscillation period of the  
generator. The second variant differs from the first by the absence of  
synchronizing pulses during cycle transmission, i.e., it represents a  
start-stop synchronizing system of the driven generator which has the same  
frequency as the driving generator. This variant of asynchronous power  
supply is discussed in the report. It is distinguished by its simplicity  
and, with the use of a high stability generator, it can ensure reliable  
two-direction operation. There are 5 references, all Soviet (including  
1 translation).

Shalimov, V.K. Some Possible Methods of Designing Transistorized Components  
for Digital Computers 241

This report suggests methods for designing a universal logical circuit  
OR - not OR and a trigger for two other types of lines between the  
components, namely the pulse line and the stored pulse - potential lines.  
The author finds it possible to build such circuits using only one trans-  
istor which in turn simplifies the component design. He also makes sug-  
gestions on how to realize triggering at the calculating unit input in the  
asymmetric type of relays for both cases of linking between components.  
He suggests how to obtain low output resistance of the asymmetric static  
circuit in both its states. The possibility of realizing the suggested  
circuit is proved by experimental checking which gave satisfactory re-  
sults. There are 5 references: 2 Soviet, and 3 English.

STRELKOV, B. I.

95

S/089/62/013/006/019/027  
B102/B186

AUTHORS: G. T. and M. R.

TITLE: Nauchnaya konferentsiya Moskovskogo inzhenerno-fizicheskogo instituta (Scientific Conference of the Moscow Engineering Physics Institute) 1962

PERIODICAL: Atomnaya energiya, v. 13, no. 6, 1962, 603 - 606

TEXT: The annual conference took place in May 1962 with more than 400 delegates participating. A review is given of these lectures that are assumed to be of interest for the readers of Atomnaya energiya. They are following: A. I. Leypunskiy, future of fast reactors; A. A. Vasil'yev, design of accelerators for superhigh energies; I. Ya. Pomeranohuk, analyticity, unitarity, and asymptotic behavior of strong interactions at high energies; A. B. Migdal, phenomenological theory for the many-body problem; Yu. D. Fizevskiy, deceleration of medium-energy antiprotons in matter; Yu. M. Kogan, Ya. A. Iosilevskiy, theory of the Mossbauer effect; M. I. Ryasanov, theory of ionization losses in nonhomogeneous medium; Yu. B. Ivanov, A. A. Rukhadze, h-f conductivity of subcritical plasma;

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18

8/089/62/013/006/019/027  
B102/B186

Nauchnaya konferentsiya...

B. V. Pletnev, F. M. Spevakov, A. M. Stolov, supply of synchrotron electro-  
magnets; G. L. Saksaganskiy, V. Ya. Moiseyev, flanged separable heat-re-  
sistant junctions of great diameter; B. G. Klimov, A. S. Vayradyan,  
V. P. Yevseyev, I. B. Mikhaylov, I. N. Afonskiy, B. N. Belov, Ye. I. Mam-  
nov, B. I. Strelkov, Ye. V. Sedykh, B. A. Shohukin, optical principles in  
computer engineering technique; R. S. Nakhmanson, E. M. Roysin,  
M. E. Mostovlyanskiy, Yu. A. Volkov, electronics; Ye. L. Sulim, transmitter  
for electromagnetic flow-meter, V. M. Ovsyankin, V. M. Plushnikov, applica-  
tion of varicondes for transforming d.c. into a.c.

Card 4/4

STRANIC 3.P

Index indexes of 13 Mira type long-period variable stars (with  
abstract in French) Ser. zvezdy 11 no. 2:65-102 Ap '57. (MIRA 10:7)

1. Astronomicheskaya observatoriya Odesskogo gosudarstvennogo  
universiteta im. I. I. Kochaikova.  
(Stars, Variable) (Stars--Color)

82592

S/170/60/003/005/009/017  
B012/B056

24.2120

AUTHORS: Strelkov, G. I., Yas'ko, O. I.

TITLE: Measurement of the Velocity of a Luminous Jet

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, 1960, Vol. 3, No. 5,  
pp. 93 - 95

TEXT: In the present paper, the method of measurement and several results obtained in the laboratory when measuring the jet velocity are given. The device used for this purpose is based on the principle of stabilization of a precise carbon arc by means of water (Ref. 1). The jet temperature was 11,500°K. The jet velocity was determined by the photoanalyzing method (Ref. 2). Measurements were carried out by means of a slow-motion camera of the type "ZL-1" with a normal objective. The application of the photoanalyzing method for determining the jet velocity was possible because the jet, as shown by its analysis (Fig. 1), is characterized by a fluctuation of its brightness in time. In this connection, reference is made to a paper by R. Weiss (Ref. 3). In the present case, some of the features mentioned here indicate that these

Card 1/2

STRELKOV, G.I.; YAS'KO, O.I.

Using the method of photographic image scanning for determining  
the velocity of a high-temperature gas stream. Usp.nauch.fot.  
9:219 '64. (MIRA 18:11)

ACC NR: AR6020770

SOURCE CODE: UR/0269/66/000/003/0067/0067

AUTHOR: Strelkov, G. M.

TITLE: Effect of the cloud cover of Venus on its radio emission in the centimeter- and millimeter-wave bands

SOURCE: Ref. zh. Astronomiya, Abs. 3.51.565

REF SOURCE: Sb. Vopr. astrofiziki. Kiyov, Nauk. dumka, 1965, 21-46

TOPIC TAGS: Venus planet, planetary atmosphere, <sup>cosmic</sup>radio emission

ABSTRACT: A model of the atmosphere of Venus was calculated with the assumption that the planet's cloud cover consisted of droplets of water and had a moisture content of the same order as the Earth's atmosphere. The atmosphere of Venus was considered to be in an adiabatic equilibrium (a pressure of 10 atmospheres on the surface) and consisting of 95% N and 5% CO<sub>2</sub>. The results of the calculation of the spectrum of the radio emission of the planet, made on the assumption that the temperature on the planet's surface was 600°K and that the temperature of the 3-km-thick cloud layer was 273°K, agreed well with the experiment within a wide range of wavelengths, but near  $\lambda = 1.35$  cm the calculations disagreed strongly with the experimental data. This disagreement suggested the presence of some other absorption agent. The planet's cloud cover probably consisted of liquid hydrocarbons, CH<sub>3</sub> and HCN being the most suitable.

UDC: 523.42

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ACC NR: AR6020770

It is postulated that the high-temperature brightness on the surface of Venus, detected within the centimeter-wave band, is related to the presence of a hot planet core and a crust (consisting, for instance, of crystalline quartz), that is relatively transparent for radiofrequency waves. Bibliography of 58 titles. A. Kislyakov. /Translation of abstract/

SUB CODE: 03

Card 2/2



L 41083-66 EWT (1) GW

ACC NR: AP6028338

SOURCE CODE: UR/0293/66/004/004/0581/0591

AUTHOR: Strelkov, G. M.

ORG: none

TITLE: Thermal effect in the Venusian atmosphere

SOURCE: Kosmicheskiye issledovaniya, v. 4, no. 4, 1966, 581-591

TOPIC TAGS: planetary atmosphere, Venus, radiative heat transfer, atmospheric temperature, cloud cover, heat transfer,

ABSTRACT: The problem of radiative-energy transfer and a possible concomitant thermal effect in the Venusian atmosphere beneath the cloud layers is examined. It is assumed that the atmosphere is in a state of local thermodynamic equilibrium and that the energy transfer is accomplished solely by means of absorption and reradiation and that the cloud layer completely absorbs radiation in the infrared region. Two cases are examined: 1) where the coefficient of absorption of the atmosphere is independent of frequency, the "gray" atmosphere, and 2) where the coefficient of atmospheric absorption in the 8-12- $\mu$  wavelength interval is considerably less than the coefficient of absorption in the rest of the infrared spectra. In both cases the presence of

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UDC: 523.164.3.523.42

56  
B

ACC NR: AP6028338

the cloud cover accounts for only a small decrease in the required optical depths. On the assumption that carbon dioxide amounts to 5 and 15% of the total mass of the Venusian atmosphere, the amounts of water vapor which, together with the indicated amounts of CO<sub>2</sub>, could cause the required opaqueness of the atmosphere in the 8—12- $\mu$  range, are estimated. If the surface pressure is 5 atm, then the atmosphere must contain 18.6 g/cm<sup>2</sup> of H<sub>2</sub>O and 1.3·10<sup>5</sup> atm·cm of CO<sub>2</sub> or 17.8 g/cm<sup>2</sup> of H<sub>2</sub>O and 3.9·10<sup>5</sup> atm·cm of CO<sub>2</sub>, respectively, in order to heat the surface to a temperature of 600K. If  $p_0 = 10$  atm, then 8.7 g/cm<sup>2</sup> of H<sub>2</sub>O and 2.6·10<sup>5</sup> atm·cm of CO<sub>2</sub> or 7.1 g/cm<sup>2</sup> of H<sub>2</sub>O and 7.8·10<sup>5</sup> atm·cm of CO<sub>2</sub> would be required. Orig. art. has: 30 formulas, 1 figure, and 1 table. [DM]

SUB CODE: 03/ SUBM DATE: 23Jul65/ ORIG REF: 010/ OTH REF: 014  
ATD PRESS: 5056

Card 2/2 *llh*

L 3218-66 FBD/EWT(1) GS/GW/WS-4

ACCESSION NR: AT5024604

UR/0000/65/000/000/0021/0046

AUTHOR: Strelkov, G. M.

TITLE: The effect of the cloud cover of Venus on its radio emission in the centimeter and millimeter wave bands

SOURCE: AN UkrSSR. Voprosy astrofiziki; issledovaniye atmosfer Veneri i Marsa (Problems in astrophysics; investigation of the atmosphere of Venus and Mars). Kiev, Izd-vo Naukova dumka, 1965, 21-46

TOPIC TAGS: Venus, planetary astronomy, Venusian cloud cover, Venus radio emission

ABSTRACT: A number of hypotheses have been advanced to explain the high effective temperature of the radio emission of Venus in the centimeter wave band. To test these hypotheses, the author analyzes a model of the atmosphere having structural parameters corresponding to the results of astronomical observations. It is assumed that the cloud cover over Venus consists of a layer 3 km thick, composed of water droplets, above which there is a layer of ice crystals 8 km thick. The spectral characteristics of the radio-brightness temperature in the 0.3-22-cm band were calculated on atmospheric models constructed

Card 1/2.

L 3218-66

ACCESSION NR: AT5024604

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for various values of the water content of clouds and of the surface pressures  $p_0 = 5$  atm and  $p_0 = 10$  atm. Comparison of theoretical characteristics with the results of measurements of the radio-emission temperature of Venus at various wavelengths shows that the cloud cover of the planet cannot be aqueous. Various hypotheses on the nature of Venusian clouds are analyzed. It is concluded that the clouds cannot consist of solid nonconducting powders and are, most probably, made up of a liquid with molecules having a constant dipole moment. A supposition is advanced that the high effective temperature of the radio emission of Venus may be explained by emission from the heated interior of the planet. Orig. art. has: 2 figures, 3 tables, and 33 formulas. [JJ]

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