

1. SHAYTAN, I. M.
2. USSR (600)
4. Pollen
7. Reciprocal effect of separate components in a pollen mixture. *Agrobiologia*.
no. 5, 1952

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

SHAYTAN, I.M.

Study of remote hybridization of fruit. Trudy Bot.sada AN URSR
3:56-65 '55. (MLBA 10:8
(Fruit culture) (Hybridization, Vegetable)

USSR/Cultivated Plants. Introduction and Acclimatization. 4

Abs Jour: Ref Zhur-Biol., No 5, 1958, 20212.

Author : I. M. Shaytan

Inst : Not given.

Title : The Acclimatization of Chinese Peaches in Kiev. (Akklimati-
zatsiya kitayskikh persikov v usloviyakh Kiyeva).

Orig Pub: Tr. Botan. Sada. AN USSR, 1957, 4, 20-25.

Abstract: The three year old Chinese peach seedlings in the Botanical Garden of the Academy of Sciences Ukrainian SSR withstood a very severe winter in 1953/54 when the soil froze through to a depth of 1.5 meters. The most hardy of these bore fruit in 1954 and 1955. The fruits differed both in ripening time (from the beginning of August to the end of September) and in other characteristics. Late ripening forms with dense pulpy flesh

Card : 1/2

SHAYTAN, I.M.; KLEYEVA, R.F.

Developing new grape varieties in the northern Ukraine.
Trudy Bot.sada AN URSS 6:98-105 '59. (MIRA 13:5)
(Ukraine--Grape--Varieties)

SHAYTAN, I. M.

Acclimatization of Chinese peaches in the northern part of the
Ukraine. Trudy Bot. inst. Ser. 6 no. 7: 155-156 '59.
(MIRA 13:4)

1. Botanicheskiy sad AN USSR, Kiyev.
(Ukraine--Peach)

SHAYTAN, I.M.

Prospective forms of apple trees for landscape gardening. Visnyk
Bot. sada AN URSR no. 2:75-78 '60. (MIRA 14:4)
(Ukraine—Apple) (Landscape gardening)

SHAYTAN, I.M.; KLEYEVA, R.F.

Viability of pollen in some fruit plants. Biul. Glav. bot.
sada no.55:38-41 '64. (MIRA 18:11)

1. Tsentral'nyy respublikanskiy botanicheskiy sad AN UkrSSR,
Kiyev.

SHANTAN, U.S.

1. [Illegible text]

2. [Illegible text]

GOLUBEV, Yu.B.; ZYBALOVA, G.P., kand.tekhn.nauk; PETUKHOVA, N.N.; SECHAD'KO, A.M.

Gas formation dynamics in the gasification of a lignite seam
at the experimental "Podzemgaz" gas generator station in the
Angren Basin. Trudy VNIIPodzemgaza no.13:11-17 '65.

(MIRA 18:8)

1. Laboratoriya tekhnologii podzemny gasifikatsii uglya Vsesoyuznogo
nauchno-issledovatel'skogo instituta podzemny gasifikatsii ugley.

SHCHAVLIN, D.S., doktor tekhn.nauk, prof.

Dissemination of standard methodology of the Academy of Sciences of the U.S.S.R. on dynamic models of electric power systems. Izv.vys. ucheb.zav.; energ. 8 no.9:67-73 3 '65.

(MIRA 18:10)

L. Leningradskiy politekhnicheskiiy institut imeni M.I.Kalinina.
Predstavlena kafedroy ispol'zovaniya vodnoy energii.

KUMBAROV, A.S.; GOSHAVERDIN, V.M.; MAKHYOROV, P.A.

Inst. for hardness measurement at high temperatures. Lev. Lab.
31 no.3:374-377 '65. (MIRA 18:12)

1. Moskovskiy inzhenerno-fizicheskii Institut.

SHCHAVLEV, N., podpolkovnik

Leading force of a rocket division. Komr. Vooruzh. Sil
46 no.6:42-45 Mr '65. (MIRA 18:11)

KROPACHEV, L.N.; SHAYTAN, O.I.

Some characteristics of sea level fluctuations in the Kerch Strait.
Okeanologiya 1 no.5:837-845 '61. (MIRA 15:3)

1. Gidrometeorologicheskaya observatoriya Chernogo i Azovskogo
morey Upravleniya gidrometeorologicheskoy sluzhby USSR.
(Kerch Strait--Hydrography)

SHAYTAN, O.I.

Representativeness of observations on the temperature and
density of the water at the stations of the Sea of Azov.
Sbor. rab. GMO CHAM no.1:64-66 '62. (MIRA 17:5)

SOV/124-58-7-7669

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 7, p 49 (USSR)

AUTHORS: Gugnyayev, Ya.E., Shaytan, V.S.

TITLE: On a Method of Computing the Nominal Wind Velocity for the Forecasting of the Wave Regime of Water Reservoirs (O metodike vychisleniya raschetnoy skorosti vetra dlya prognoza volnovogo rezhima vodokhranilishch)

PERIODICAL: Tr. Gidravl. labor. Vses. n.-i. in-t vodosnabzh., kanaliz., gidrotekhn. sooruzh. i inzh. gidrogeol., 1957, Nr 6, pp 87-94

ABSTRACT: The dimensions of the wind waves depend upon the wind velocity and the fetch. A.P. Braslavskiy (Tr. Gos. gidrol. in-ta, 1952, Nr 35) recommends that the nominal wind velocity be computed from the standard observations of continental meteorological observatories with the inclusion of two coefficients accounting for the height of the measuring device and the peculiarities of the respective locale. The authors recommend an additional coefficient K which takes into consideration the effect of the surface of the reservoir and its dimensions in the direction of the wind flow (i.e., the fetch) on the change in the wind velocity. The relationship between the K coefficient and the

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SOV/124-58-7-7669

On a Method of Computing the Nominal Wind Velocity (cont.)

wind fetch is derived from comparative records of wind-velocity observations taken for periods of many years at different meteorological observatories prior to and after filling of nearby water reservoirs; K is always greater than unity; with a fetch of 100 km, $K = 1.4$. Bibliography: 6 references.

Ya.G. Vilenskiy

1. Inland waterways
--Applications
2. Water waves--Theory
3. Wind--Velocity
4. Mathematics

Card 2/2

[Faint, illegible text, possibly a list or report content]

SHAYTAN, V.S., kand. tekhn. nauk

Some methods of reducing the height of waves breaking on
slopes. Trudy Gidrav. lab. VODGAS no.10:53-61 '63.

(MIRA 17:8)

SHAYTAN, V. I., kand. tekhn. nauk

Using single-layer elements under the covering of earth
slopes. Trudy lab. gidr. skoruzh. VODGEO no. 4:197-207 '63.

Study of the condition of multi-layer elements under the
protective covering of slope Ibid.:208-223

SHAYTAN, V.S.; SMIRNOVA, A.P., red. izd-va; RUDAKOVA, N.I., tekhn.
red.

[Design for strengthening the earth slopes of reservoirs]
Proektirovanie krepnenii zemlianykh otkosov na vodokhranili-
shchakh. Moskva, Gosstroizdat, 1962. 214 p.

(Reservoirs) (Shore protection) (MIRA 15:12)

SHAYTAN, V.S., kand.tekhn.nauk

Study of wind waves in a reservoir. Trudy Gidrav.lab.VGDGEO
no.9:61-99 '62. (MIRA 15:11)
(Kakhovka Reservoir--Waves)

SHAYTAN, V.S., kand. tekhn.nauk

In situ investigations in reinforcing earthen slopes. Trudy
Gidrav.lab.VODGEO no.9:185-219 '62. (MIRA 15:11)
(Kakhovka Reservoir--Hydraulic engineering)

SHAYTANOV, A. V.

"Propagation of Cherries and Plums by Green (Summer) Grafting."
Cand Agr Sci, Omsk Inst of Agriculture, Omsk, 1953. (RZhBiol, No 4,
Feb 55)

SO: Sum. No. 631, 26 Aug 55-Survey of Scientific and Technical
Dissertations Defended at USSR Higher Educational Institutions
(14)

RATNER, V.A., inzh.; DUBROVA, Ye.P., inzh.; VINOKUROV, A.A., inzh.;
SHAYTANOV, G.S., inzh.

Designing and manufacturing prestressed reinforced large-span
elements for concrete bridges. Transp. stroi. 8 no.2:23-26
F '58. (MIRA 11:2)
(Czechoslovakia--Bridges, Concrete)

MATVEYEV, B.V., kandidat tekhnicheskikh nauk; DAVYDOVICH, I.L., inzhener;
SHAYTANOV, S.M., inzhener.

Appearance of counterpressure in the coal body in mining seams subject
to sudden ejections. Ugol' 29 no.12:9-17 D '54. (MLRA 8:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy marksheyderskiy institut.
(Coal mines and mining) (Mine gases)

ROMANOV, I.I., and HAYTANOV, V. I., 1971.

Modernisation and automation of manual work in the industry of
the White-Russian Republic. Part 1. Avt. Prilozh. 13
no. 8-10-1971.

(MIRA 17-10)

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... of the

... ..

MERKULOV, Aleksandr Ivanovich; SHAYTOR, Petr Seliverstovich; SHTENGER, N.V.,
redaktor; SIDEL'NIKOVA, L.A., redaktor izdatel'stva; SHITS, V.P.,
tekhnicheskii redaktor

[The salvaging department in a woodworking enterprise; experience of
the Volodarskii Spool Factory] TSekh shirпотреba na derevoobrabaty-
valushchem predpriatii; opyt katushechnoi fabriki imeni Polodarskogo.
Moskva, Goslesbumizdat, 1956. 40 p. (MLRA 9:12)
(Woodworking industries)

BEYLIN, Sholom Iyerukhimovich; SHAYTOR, Petr Seliverstovych; AKSENOV, G.A.,
redaktor; BEL'CHENKO, N.I., redaktor izdatel'stva; BACHURINA, A.M.,
tekhnicheskiy redaktor

[Manufacture of spools] Katushechnoe proizvodstvo. Moskva, Gosles-
bumizdat, 1956. 175 p. (MLRA 10:1)
(Woodworking machinery) (Thread)

SHAYUSUPOV, Sh.Yu., kandidat tekhnicheskikh nauk.

Experimental investigation of adhesive power in bricklaying using
local materials of Uzbekistan. Trudy Inst.soor.AN Uz.SSR no.6:3-31'55.
(MLRA 10:1)

(Uzbekistan--Bricklaying)

SHAYKHOV, S. YU.
Country : USSR
Category : Human and Animal Physiology, Circulation
Abs. Jour. : Ref zhur biol, No. 2, 1959, No. 8073
Author : SHAYKHOV, S. YU., GILIBEROVA, N. I.
Title : Peculiarities of the EKG in Children with Combined Helminthic Invasion (Acarriasis and Trichuriasis).
Orig Pub. : Med. zh. Uzbekistana, 1958, No. 4, 49--53
Notes : no abstract

Cover: 1/1

SHAYYER, T.S.

SHAYYER, T.S., Cand Bio Sci -- (diss) "Changes in the albumin-lipoid complexes of the blood serum of horses in the process of hyperimmunization." Mos, 1958. 14 pp (Mos Vet Academy of the Min of Agr USSR). 140 copies (KL, 20-58, 96)

SHAYZHANOV, A.

Workers of an automotive transportation unit increase
labor productivity. Avt.transp. 38 no.7:39-40 JI '60.
(MIRA 13:7)

1. Nachal'nik 4-y Alma-At'inskoy avtoAZY.
(Alma-Ata--Transportation, Automotive--Labor productivity)

SHAYZHANOV, I.

Achievements of the Alma-Ata motorbus fleet collective. Avt.transp.
33 no.10:36 0 '55. (MIRA 9:1)

1. Director Alma-Atinskogo avtobusnogo parka.
(Alma-Ata--Motorbus lines)

SHAYZHANOV, I.

Improve the organization of automotive units. Avt.transp. 37
no.11:35-36 N '59. (MIRA 13:2)

1. Nachal'nik 4-y Alma-Atinskoy avtobazy.
(Transportation, Automotive)

SHAYZHANOV, I.

Follow the course of the beacon lights. Avt.transp. 39 no.6:5-6 Je
'61. (MIRA 14:7)

1. Nachal'nik 4-y Alma-Atinskoy avtobazy.
(Alma-Ata Province--Transportation, Automotive)
(Socialist competition)

L 24162-65 EWP(m)/EWG(v)/EWT(1)/FS(v)-3/T-2 Pe-5/Pg-4/Po-4/Pq-4 IJP(c) GW
ACCESSION NR: AR5000984 S/0044/64/000/009/B044/B044

SOURCE: Ref. zh. Matematika, Abs. 9B180

AUTHOR: Shaziyatov, I.

TITLE: The transformation of equations of motion of holonomic systems with multiple links in the presence of forces proportional to the pulses

CITED SOURCE: Nauchn. tr. Tashkentsk. un-t., vyp. 222, 1963, 92-98

TOPIC TAGS: holonomic system, equation of motion, canonical equation of motion, multiple bonded holonomic system, excess coordinate, potential force, resistance force, proportional force pulse

TRANSLATION: It is assumed that the bond attached to the holonomic mechanical system are given by the equations

$$f_{\mu}(t, q_1, q_2, \dots, q_n) = 0 \quad (\mu = 1, 2, \dots, m) \quad (1)$$

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ACCESSION NR: AR5000984

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between some independent general coordinates q_1, q_2, \dots, q_k ($k=n-m$) (referent's definition) and dependent variables $q_{k+1}, q_{k+2}, \dots, q_n$, taken as "excess" (superfluous) coordinates of the system (in the text of the paper all the "n" variables satisfying the bond equations are inaccurately called excess coordinates). Then the bond equations are differentiated to obtain the ratio (2) between independent general velocities and excess velocities; excess pulses appear, corresponding to the latter. It is assumed that not only potential forces act on the system, but also resistance forces, proportional to all pulses, including the excess pulses. The equations are set up in canonical form for a holonomic, non-conservative system, with consideration of the indicated resistance forces and also with the excess terms. No example is presented of either mechanical or formal content illustrating the usefulness of leaving the excess coordinates in the differential equations of motion of the system. V. Dobronravov

SUB CODE: MM

ENCL: 00

Card 2/2

SHAZIYATOV, Sh.

Integration of equations of motion of holonomic systems
with coupling multipliers in the presence of a resistance
proportional to impulses. Nauch. trudy TashGU no.209. Mat.
nauki no.23:39-47 '62. (MIRA 16:8)

SHAZTC, Kh. Yu., inzh.

Economy of 25 rail meters in the construction of rail cuts
for switch layouts. ~~Transp~~stroi 13 no. 11:9-10 N '63.
(MIRA 17:5)

VIKHLIYAYEVA, R.P.; ZHDAN, A.G.; SHBEL'NIKOVA, A.E.

Interagency Seminar on Cathode Electronics. Radiotekh. i elektron.
5 no.10:1746-1748 O '60. (MIRA 13:10)
(Cathodes) (Electron tubes)

STRELIANOVA, N. V.

"Thiamine and Its Derivatives in the Blood and Urine of Healthy and Sick Children," cop.
Ped. i Otkrivan. Mater. i Met., 16, No. 5, 1948. Prof., Lab. Biochemistry of Growth,
Republic Sci. Res. Pediatrics Inst., -cl948-.

SHCHADILOV, Aleksandr Ivanovich, agronom; SELEZNEV, N.G., red.; FULIN,
L.I., tekhn. red.

[Structure of arable crop acreage] O strukture posevnykh plo-
shchadei. Tula, Tul'skoe knizhnoe izd-vo, 1962. 22 p.
(MIRA 15:3)

(Tula Province--Farm management)

16(2)

SOV/2-59-3-3/13

AUTHOR: Shchadilov, N.

TITLE: The Most Important Tasks of the Statistics of Capital Construction. (Vazhneyshiye zadachi statistiki kapital'nozo stroitel'stva.)

PERIODICAL: Vestnik statistiki, 1959, Nr 3, pp 24-33. (USSR)

ABSTRACT: The author lists the tasks and problems faced by Soviet statistics in the field of capital constructions planned for the period 1959-1965. There will be twice as much capital investment as during the past seven years, including the building of 140 new chemical plants and the reconstruction of 130 now existing, 1.7 times more electric plants capacity than was obtained from the electric plants built in 1952-1958, 15 million housing apartments. He points out that a clear and comprehensible methodology of capital construction statistics must be worked out and clear instructions for setting up the records must be given. Statistical organs must

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VOLODARSKIY, L.M., red.; BUTOV, A.S., red.; MOSKOVKINA, A.S.,
red.; SHCHADILOV, N.M., red.; MAKAROVA, O.K., red.;
PROLOVA, N.P., red.

[Industry of the U.S.S.R.; statistical abstract] Pro-
myshlennost' SSSR; statisticheskii sbornik. Moskva,
Izd-vo "Statistika," 1964. 494 p. (MIRA 17:6)

1. Russia (1923- U.S.S.R.) Tsentral'noye statisticheskoye
upravleniye. 2. Zamestitel' nachal'nika Tsentral'nogo sta-
tisticheskogo upravleniya SSSR (for Volodarskiy).

TOKAREV, F.V., izobretatel', Geroy Sotsialisticheskogo Truda; SMIRNOV, I.V., izobretatel' v oblasti stroymaterialov; POKROVSKIY, G.I., professor, do'ktor tekhnicheskikh nauk; SHIRKOV, I.P., novator stroitel'noy industrii; CHIKIREV, N.S., novator; KOTOVA, S.A., novator, brigadir pryadil'shchits; LOGIN, M.I., izobretatel', inzhener; SLIVOCHKIN, F.P., ratsionalizator; MERKULOV, I.A., izobretatel', konstruktor dvigateley; KOSMATOV, N.V., izobretatel' v oblasti kino; KHLEBTSEVICH, Yu.S., izobretatel', kandidat tekhnicheskikh nauk; SHCHADILOV, V.I., ratsionalizator-naladchik.

"Inventor" has a proud ring to it! Tekh. mol. 25 no.3:1-3 Mr '57.

(MIRA 10:6)

1. Deputat Verkhovnogo Soveta SSSR (for Shirkov). 2. Nachal'nik tsekha zavoda imeni Sergo Ordzhonikidze (for Chikirev). 3. Fabrika imeni Kalinina (for Kotova). 4. Termitnostrelochnyy zavod (for Login). 5. Zavod "Kauchuk" (for Slivochkin).

(Inventions)

POKROVSKIY, V.S.; SHCHADILOV, Yu.M.

Development of the marking of mammals in the U.S.S.R.
Migr. zhiv. no.3:5-9 '62. (MIRA 16:2)

1. Komissiya po okhrane prirody pri Gosplane SSSR.
(Mammals)
(Animals, Marking of)

POKROVSKIY, V.S.; SHCHADILOV, Yu.M.

State of the study of the migration of bats in the U.S.S.R.;
based on the data of banding. Migr. zhiv. no.3:10-20 '62.
(MIRA 16:2)

1. Komissiya po okhrane prirody pri Gosplane SSSR.
(Bats)
(Animal migration)

POKROVSKIY, V.S.; SHCHADILOV, Yu.M.

Effect of man's work on changes in the habitat and number of
moose. Okhr.prirod. zapov.delo v SSSR no.7:57-65 '62.
(MIRA 16:4)

(Moose)

L 00150-71 1 111 T

ACC NR: AP6029589

(A, N)

SOURCE CODE: UR/0358/66/035/001/0073/0077

AUTHOR: Shchadilov, Yu. M.ORG: Central Scientific Research Disinfection Institute, Ministry of Health SSSR, Moscow (Tsentral'nyy nauchno-issledovatel'skiy dezinfektsionnyy institut Ministerstva zdravookhraneniya SSSR)TITLE: New insecticide sevin and prospects of its use in the control of ixodes ticksSOURCE: Meditinskaya parazitologiya i parazitarnyye bolezni, v. 35, no. 1, 1966,

73-77

TOPIC TAGS: insecticide, tick, entomology

ABSTRACT: The insecticide sevin (1-naphthyl-N-methyl carbamate), which has been developed in the USA and is being produced in the USA and Western Europe, has been tested in the USSR. Laboratory and field tests indicated that sevin has a high effectiveness against the larvae, nymphs, and imagoes of *Ixodes persulcatus*. P. Sch. ticks. The field tests, which were conducted in Perm'skaya Oblast', also showed that sevin lowered considerably the number of insects of the families Coccinellidae, Braconidae, and Chalcididae, while exhibiting almost no activity with respect to Staphylinidae and Icheumonidae. It had an insecticidal effect on pests of the families Elateridae, Chrysomelidae, Curculionidae, Chloropidae, and some others. Laboratory tests showed that it had low systemic activity against *Xenopsylla cheopis* fleas infesting white mice: after sevin dissolved in vegetable oil had been given perorally to the mice in a dose of 500 mg/kg, 37.5% of the fleas died. The author thanks the head and workers of the Perm'

Antiepidemic Detachment, Ministry of Health RSFSR (headed by Candidate of Biological Sciences S. A. Shilova) for assistance in the work. The author further thanks Senior Scientific Collaborator of GosNIIG, M. B. Azar'yan for providing the compounds. Orig. art. has 3 tables. /LJESS/

SUB CODE: 06 / SUBM DATE: 24 Mar 65 / ORIG REF: 009 / OTH REF: 015

Card 1/1 UDC: 614.449.542:615.778.524

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5(O)
AUTHORS:
Mashovets, V. P., Ponomareva, A. M. 807/153-2-2-51/31

TITLE:
Chromole. All-Union Competition for the Best Students-
Paper Concerning Chemistry and Chemical Technology of the
Scholastic Year 1957-1958 (Khromika. Vsesoyuzny konkurs
na luchshuyu studentskuyu rabotu po khimii i khimiches-
koj tekhnologii za 1957-1958 uchebnyy god)

PERIODICAL:
Izvestiya vreshnih uchebnykh svedeniy. Khimiya i khimiches-
kaya tekhnologiya, 1959, Vol 2, Nr 2, Pp 303-304 (USSR)

ABSTRACT:
The Ministerstvo Vysshego obrasovaniya SSSR (Ministry for
University Education of the USSR) carried out the competition
mentioned in the title, within the framework of the
Studencheskiye nauchnyye obshchestva (Scientific Student
Societies) covering 37 branches of science, technology,
arts, and culture. The leading role in the organization
of the competition was played by the Khimicheskoye in-
stitut imeni Lomonosova (Lomonosov Institute of Chemistry
of the USSR Academy of Sciences). The competition was
conducted in the form of a "round table" discussion on
"Chemical Technology". A commission was formed consisting of
Professor V. B. Alakozvskiy, V. P. Mashovets (Chairman),
I. P. Makhlenov, A. A. Petrov, B. A. Porya-Ioshits,
D. M. Ponomareva (Secretary), and Candidate of Chemical Sciences
A. M. Polonskiy. The following persons acted as
jurors: The Professors A. P. Alabyshov, A. M. Ginstling,
I. S. Ioffe, I. Kuznetsov, L. Ya. Krasnov, A. B. Kusov,
A. M. Mal'kov, I. Myagkichev, E. P. Nefedov, A. A. Petrov,
Ya. K. Kovodranov, V. P. Mashovets, A. M. Polonskiy, A. V.
Satal'kin, A. I. Storonkin, and A. L. Solov'ev, A. V.
Sokolov, A. M. Khaletskiy, Doctorate A. Ya. Voronkova with collabora-
tors, M. I. Gildengerzal', O. P. Ginzburg, I. D. Kabanov,
S. G. Zhavoronok, S. M. Zhilov, Ye. S. Roskin, P. M. Golov,
E. P. Starostenko, M. M. Sychev, A. S. Zhukovskiy, Chief
scientific researcher - E. P. Ioffe, Candidates of Sciences:
G. A. Mal'chenko, M. K. Bryazova, O. M. Setkina,
B. P. Iur'ev, Engineers: Kostyeva, Senyushova, and Yarmo-
linskaya. The paper "Synthesis and Self-oxidation of the p-Di-
secondary Butyl-benzene" by V. S. Zavgorodny, Fifth-year
student of the Khimicheskoye gosudarstvennyy universitet
(Moscow State University) was awarded a medal for being
the best. The second candidate for the medal is the
Fifth-year student of the Kiyevskiy gosudarstvennyy universi-
tet (Kiev State University) E. P. Lyubchev. He submitted
the paper "Kinetics of the Non-stationary Catalytic Decompo-
sition-process of Hydrogen-peroxide on Platinum". The third
medal was awarded to the student of the Khimicheskoye gosudarstvennyy universitet
Ivanovskiy khimiko-tekhnicheskoye institut (Ivanovo
Chemical-technological Institute) G. M. Sotnikova, A. I.
Sotnikova, T. Simagina, and E. M. Sviridova, A. I.
Ponomareva. The paper "Method of Continuous Regeneration of Zirconium-oxide
From Waste Water of the Kineshma Fibre Factory" by these
three authors, the commission selected further studies
papers which deserve publication owing to their maturity
and originality. The papers are: "Utilization of Phospho-
rized Pyrites for the Production of Local Construction-
Materials" by the fourth-year-students of the
Ivanovskiy khimiko-tekhnicheskoye institut (Ivanovo
Chemical-technological Institute) A. V. Tschilova and A. A.
Ponomareva; "Influence of the Dispersal of
Polymer Particles on the Rate of Disintegration, on the Molecular
Weight" by the Third-year-student of the Moskovskiy

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Card 2/5

Card 3/5

Chronicle, All-Union Competition for the Best Students-papers Competition in Chemistry and Chemical Technology for the Scholastic Year 1957-1958

tekhnologicheskii institut lekoy promyshlennosti (Moscow Technological Institute for Light Industry) V. M. Burdillov; "Study of the Cathodic Polimerization of the Precipitation of Chromium from Sulphide-solutions" by the Fifth-year student of the Ural'skiy politekhnicheskii institut (Ural Polytechnical Institute) V. G. Patropavlovskiy; "Gold Extractions from Watery Cyanide-solutions" by the Fifth-year students of the Moskovskiy khimiko-tekhnologicheskii institut (Moscow Chemical-technological Institute) I. I. Mendeleev; A. V. Ochin, V. A. Sorisov, and M. Ernk; "Some Investigations of the Vulcanizates of Rubbers Containing Carboxyl" by the Fourth-year-students of the Kharkovskiy tekhnologicheskii institut (Voroshilov Technological Institute) G. I. Kosarova and T. A. Shchadrichova; "Investigation of the Cathodic and anodic Processes of Cold-plate" by the Fifth-year-student of the Leningradskiy tekhnologicheskii institut (Leningrad Technological Institute) I. I. Lenovskiy; M. A. Gulya; "Spectral Determination of Molybdenum and Tungsten in Titrable-polyacids" by the Third-year-student of the Khibinskii gosudarstvennyy universitet (Kishinov State University) V. V. Gerasimov; "Capture of Dichlorine-ethane by Bone-fat in Pease-condition" by the Fourth-year-students of the Kazanskii khimiko-tekhnologicheskii institut (Kazan Chemical-technological Institute) L. I. Yashina, E. A. Muratdinov, and F. G. Shiraznev. Taken collectively, the competition has shown a high standard of the scientific research work in the circles of the Studentskoye Nauchnoye Obshchestvo (Scientific-student-societies) in many universities.

Card 4/5

SHCHADRIN, Vitaliy Nikolayevich; GUKOV, V.I., red.; BORUKOV, N.I.,
tekh. red.

[Magnetic tapes in automatic control] Magnitnaia zapis' v
avtomatike. Moskva, Gosenergoizdat, 1962. 118 p. (Biblio-
teka po avtomatike, no.53). (MIRA 15:7)
(Magnetic recorders and recording)
(Automatic control)

7.8300

S/119/60/000/001/002/013
B019/B067

AUTHORS: Bogomolov, A. M., Engineer, Petrov, V. P., Candidate of Technical Sciences, and Shchadrina, Ye. N., Engineer

TITLE: Constructive Properties in the Use of Printing Telegraph Receiver in Digital Measuring Systems

PERIODICAL: Priborostroyeniye, 1960, No. 1, pp. 4 - 6

TEXT: This paper deals with the use of industrially produced digital printing apparatus for remote measurement systems. Good results were obtained by using telegraph receivers. The authors discuss block diagrams of digital measuring systems combined with a telegraph receiver. The starting circuit for the telemetric telegraph receiver which is necessary in these circuits, is described in detail. Also a diode system is described which converts the informations given in the decimal system into the five-place telegraphy code. Furthermore, the authors discuss the circuit of a telemetric device in which an CT-35 (ST-35) apparatus is used as distributor. This circuit counts pulses in the places of hundreds,

Card 1/2

38998

4

Constructive Properties in the Use of
Printing Telegraph Receiver in Digital
Measuring Systems

S/119/60/000/001/002/013
B019/B067

tens, and units. The circuit of a telemetric pick-up with a telegraph transmitter of type T-50 (T-50) is also thoroughly discussed. There are 5 figures and 3 Soviet references.

Card 2/2

3.5000
9.8000
6.7800

S/531/60/000/103/001/002

SHADRINA

AUTHORS: Petrov, V. P., A. M. Bogomolov, and Ye. N. Shadrina

TITLE: Automatic Bridge Telemetering Meteorological Station (ATMS-M)

SERIAL: Glavnaya geofizicheskaya observatoriya. Trudy, no. 103, 1960.
Voprosy razrabotki meteorologicheskikh priborov, 10-31

TEXT: An experimental bridge-type automatic telemetering meteorological station (mostovaya avtomaticheskaya teleizmeritel'naya meteorologicheskaya stantsiya -- ATMS-M) has been developed at the Main Geophysical Observatory im. A. I. Voyeykov. It is covered by author's patent certificate No. 125916, dated 22 May 1959, issued to V. Petrov, A. M. Bogomolov, and Ye. N. Shadrina. It is designed to play a fundamental role in the thoroughgoing automation of the national hydrometeorological network, an object regarded by Soviet meteorologists to be of great importance and urgency. The ATMS differs basically from other automatic telemetering stations in that it uses a bridge-type coordinating and coding device (mostovoye koordinatno-kodiruyushcheye ustroystvo -- MKKU), but it also incorporates a number of other significant innovations. This version operates on electromechanical principles, but it could also be made contactless. Fig. 1 is a functional diagram of the ATMS. The operations

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Card 1/2

Automatic Bridge Telemetering Meteorological
Station (ATMS-M)

S/531/60/000/103/001/002

involved in automatic measurement, conversion, transmission and relaying of meteorological information are symbolically described. The ATMS consists of seven principal units: a univibrator (Fig. 2); a sweep device for the commutator system (Fig. 3); the commutator system (Fig. 4); the bridge-type coordinating and coding apparatus (MKKU) (Fig. 5); the coding network; a sweep reading device (Fig. 9); and a counter (Fig. 10). The layout of the ATMS as a whole is shown in a large foldout (Fig. 7). The function of each unit is briefly described, followed by a description of the sequence of operation of the units. A highly detailed description is provided for the MKKU and several other units. Special sections deal with: the coding cycle for the transmission of the readings from the individual measuring instruments; the length of time required for performance of various operations; the accuracy of coding and the reliability of station operation; and the possibilities of automated storage of meteorological information on punched cards. There are 10 references: 8 Soviet, 1 German, and 1 English.

✓
C

Card 2/2

DASHKEVICH, L.L.; SURAZHSKIY, D.Ya.; USOL'TSEV, V.A.; AZBEL', M.Ye.;
LOZHEVIKOV, S.N.; VORZHENEVSKIY, N.S.; MANUYLOV, K.N.;
GLAZOVA, Ye.F.; KARPUSHA, V.Ye.; PROTOPOPOV, N.G.; SHADRINA,
Ye.N.; IGRUNOV, V.D.; NECHAYEV, I.N.; BESFALOV, D.P.;
TILARIONOV, V.I.; GLEBOV, F.A.; GLAZOVA, Ye.F.; KAULIN, N.Ya.;
GORYSHIN, V.I.; GAVRILOV, V.A.; TIMOFEYEV, M.P., retsenzent;
YEFREMYCHEV, V.I., retsenzent; KRASOVSKIY, V.B., retsenzent;
V'YUNNIK, A.P., retsenzent; STERNZAT, M.S., otv. red.;
RUSIN, N.P., otv. red.; YASNOGORODSKAYA, M.M., red.; VOLKOV,
N.V., tekhn. red.

[Instructions to hydrometeorological stations and posts] Nastavle-
nie gidrometeorologicheskim stantsiam i postam. Leningrad,
Gidrometeoroizdat. No.3. Pt.3. [Meteorological instruments and
observation methods used on a hydrometeorological network] Me-
teorologicheskie pribory i metody nabliudenii, primeniaemye na
gidrometeorologicheskoi seti. 1962. 295 p. (MIRA 15:5)

(Continued on next card)

DASHKEVICH, L.L.--- (continued) Card 2.

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye gidrometeorologicheskoy sluzhby. 2. Glavnaya geofizicheskaya observatoriya Nauchno-issledovatel'skogo instituta gidrometeorologicheskikh priborov i Gosudarstvennogo gidrologicheskogo instituta (for Dashkevich, Surazhskiy, Usol'tsev, Azbel', Bozhevnikov, Vorzhenevskiy, Manuylov, Glazova, Karpusha, Protopopov, Shadrina, Igrunov, Nechayev, Besspalov, Illarionov, Glebov, Glazova, Kaulin, Gorysnin, Gavrilov). 3. Komissiya Glavnogo upravleniya gidrometeorologicheskoy sluzhby pri Sovete Ministrov SSSR (for Nechayev, Usol'tsev, Timofeyev, Yefremychev, Krasovskiy, V'yunnik)
(Meteorology)

SHCHADRONOV, B.

FA 171T86

USSR/Radio - Radio Operators
Marine Radio

Sep 50

"Through Arctic Ice," B. Shchadronov

"Radio" No 9, pp 8, 9

Describes training and work of radio operators on river trip from Archangel to Ob'-Irtysk and Yenesei River basins. Communication was maintained with Moscow, other ships, etc., under severe conditions of ice, mist and storms. Rewarded by letter from Stalin, and awards to the following, among others: L. I. Yakovlev, B. Ya. Volkov, A. A. Kuznetsov, M. A. Morozova.

171T86

С. П. ЧЕРТКОВ, Я. Б. ЗРЕЛОВ, В. Н. МАРИНЧЕНКО, Н. И. ШЧАГИН, В. М.
CHERTKOV, Ya.B.; ZRELOV, V.N.; MARINCHENKO, N.I.; SHCHAGIN, V.M.

Effect of mercaptans on the formation of insoluble sediment
in fuel. Khim. i tekhn. topl. no.12:47-53 D '56. (MLBA 10:2)

1. Nauchno-issledovatel'skiy institut goryuche-smazochnykh
materialov.
(Mercaptans) (Liquid fuels)

~~SECRET~~ Shchagin, V.M.

85-7-11/14

AUTHORS: Chertkov, Ya.B., Zrelov, V.N., Marinchenko, N.I. and Shchagin, V.M.

TITLE: Precipitate Formation in Fuels for Gas Turbine Engines (Osadkoobrazovaniya v toplivakh dlya gazoturbinnnykh dvigateley)

PERIODICAL: Khimiya i Tekhnologiya Topliva i Masel, 1957, No.7, pp. 57 - 63 (USSR)

ABSTRACT: The importance of thermal stability of fuels for aero gas turbine and jet engines with increasing speed of flying and literature data on the problem of testing and thermal stability of fuels are briefly discussed. In 1954, the authors developed a method for simultaneous determination of the corrosive activity and the susceptibility of fuels to resin and precipitate formation, which during the two-and-a-half years proved suitable for the evaluation of many fuels of various origin. In this method, a fuel in contact with a freshly polished surface of antimony bronze is submitted to a temperature of 120 °C for 6 hours. The surface area of bronze is 20 cm²/100 ml of fuel. During the test, the fuel is moving with a velocity sufficient for equalising concentrations of reacting substances (Ref.12). The following factors are determined in the test: the loss of weight of the metal, the amount of resins adhering to the surface

Card 1/3

Precipitate Formation in Fuels for Gas Turbine Engines 65-7-11/14

purification, metals from storage vessels; dust which finds its way into the fuel during transport and storage. As nearly all processes of the formation of insoluble in fuel precipitates take place in oxidising medium, and the composition of precipitate is characterised by a high content of oxygen, it can be assumed that by preventing or minimising the supply of oxygen to fuels, the velocity of the formation as well as the total amount of precipitates formed can be decreased, thus increasing the thermal stability of fuels. There are 3 tables and 13 references, 3 of which are Russian, 8 English and 2 German.

ASSOCIATION: NII GSM

AVAILABLE: Library of Congress
Card 3/3

SOV/ 65-89-7-10/12

AUTHORS: Chertkov, Ya. B; Zrelov, V. N; Shchagin, V. M. and
Marinchenko, N. I.

TITLE: The Corrosive Activity of Hydrocarbon Fuels in the
Presence of Elementary Sulphur. (Korroziynaya akti-
vnost' uglevodородnykh topliv v prisutstvii element-
arnoy sery).

PERIODICAL: Khimiya i Tekhnologiya Topliv i Masel, 1958, Nr.7.
pp. 62 - 66. (USSR).

ABSTRACT: By using radioactive indicators, the authors found that
the formation of a layer on metal is not due to
adsorption, but to chemical interaction the elementary
sulphur penetrates into the metal. Investigations on
the changes of the metals in fuel mixtures under the in-
fluence of elementary sulphur and oxygen were carried out
to define the character of occurring processes. Bronze
was used as the investigated metal, and white spirit
as the hydrocarbon mixture. The absorption of oxygen by
the fuel was measured at 125°C, at normal pressure
according to the PK method (Ref.6). The corrosion of
bronze and the quantity of deposits formed on the metal
in fuel mixtures to which elementary sulphur had been added
was also determined at 120°C during six hours (Ref.7).

Card 1/2

SOV/ 15-72-7-10/12

The Corrosive Activity of Hydrocarbon Fuels in the Presence of Elementary Sulphur.

Fig.1: A graph giving curves of the oxidation of white spirit. When white spirit was oxidised in the presence of elementary sulphur (concentration = 0.001 - 0.01%), when not in contact with bronze, it was seen that elementary sulphur acted in all cases as a strong anti-oxidant; the induction period = 300 minutes. During these oxidations it was found that the polished surface of the bronze showed definite catalytic activity. When the bronze surface was covered with a layer of cupric oxide or cuprous sulphide no catalytic activity could be observed. When elementary sulphur is contained in the fuels in quantities of 0.002 - 0.003% and higher, considerable corrosion occurs and precipitates are formed which penetrate into the fuel and cause accumulation of hard deposits. There are 4 Figures and 7 References: 4 English and 3 Soviet.

1. Fuels--Corrosive effects 2. Sulfur--Properties

Card 2/2

11(4)

PHASE I BOOK EXPLOITATION

80W/2075

Academiya nauk SSSR. Mashinostroyeniye, Msk

Khimiya svergochnicheskikh soedineniy, sodernzhuemykh v neftyakh i
bertoprotivakh (seriya III: petrolium i azot) (Chemistry of Sulphur
Organic Compounds Contained in Petroleum and Petroleum Products; [papers of the
Third Scientific Session]) Moscow, Izd-vo AN SSSR, 1959. 376 p.
2,000 copies printed. Strata etly inserted.

Editorial Board: R.D. Obolentsov (Resp. Ed.) Doctor of Chemical Sciences;
G.P. Gal'pern, Doctor of Chemical Sciences; Ya. B. Chernikov, Doctor of Technical
Sciences; V.V. Ponor, Candidate of Technical Sciences; and V.P. Borkhastvennitskiy,
Candidate of Chemical Sciences; Ed. of Publishing House: I.I. Brumov
Tech. Ed.: T.P. Polenova.

PURPOSE: This book is intended for chemists, chemical engineers, and technicians
specializing in the chemistry of petroleum.
CONTENTS: The book is a collection of papers presented at the Third Scientific
Session on the Chemistry of Organic Sulphur- and Nitrogen Compounds Contained
in Petroleum and Petroleum Products. The scientific session was held in Ufa,
June 3-8, 1957. The book consists of the following sections: 1) Synthesis, charac-
terization, and analysis of organic sulfur compounds; 2) Separation and
composition of organic sulfur compounds contained in petroleum and petroleum
products; 3) Transformation of organic sulfur compounds by thermal catalysis;
4) Corrosive properties of organic sulfur compounds and hydrogen sulfide
and petroleum products; 5) Uses of organic sulfur compounds and hydrogen
sulfide; 6) Physiological properties of organic sulfur compounds. No personal-
ities are mentioned. There are 315 references of which 179 are Soviet,
118 English, 5 French, 12 German, and 1 Czech.

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From the Editorial Staff 3

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Card 2/10

Chemistry of Sulphur Organic Compounds (Cont.) 80W/2075

PART IV. CORROSIVE ACTIVITY AND TAR FORMATION OF
SULFUR-CONTAINING PETROLEUM AND PETROLEUM PRODUCTS

Zakharochkin, L.D., S.M. Vol'fson. Corrosive Properties of Sulfur-
containing Petroleum 269

Berzolin, I.Ye., O.Y. Platinov, Ye.V. Khorobavskina, G.P. Belyayeva,
M.B. Mal'kova. Corrosive Properties of Petroleum Products
containing Petroleum 276

Chertkov, Ya.B., V.M. Zvelov, Y.M. Shtegalin. Organic Sulfur Compounds in
Fuels as Inhibitors in the Corrosion of Copper and Its Alloys 284

Fuchkov, B.G., V.M. Gavryukhin. Methods of Controlling the Wear of
Engines Due to Corrosion Caused by Use of Diesel Fuels With a High
Sulfur Content 293

Card 8/10

62

S/081/62/000/012/032/063
B166/B101

AUTHORS: Chertkov, Ya. B., Zrellov, V. N., Shchagin, V. M.

TITLE: Organosulfur compounds in fuels as inhibitors of corrosion in copper and its alloys

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 12, 1962, 350-351, abstract 12I202 (Sb. "Khimiya seraorgan. soyedineniy, soderzhashchikhsya v neft'yakh i nefteproduktakh". M., AN SSSR, 1959, 284-292)

TEXT: The question of the corrosive activity of fuels containing sulfurous compounds, and the corrosion of fuel system elements in gas turbine engines, made from Cu and Cu alloys is examined. [Abstracter's note: Complete translation.]

Card 1/1

34975
S/080/62/035/002/015/022
D258/D302

11.0132

AUTHORS: Chertkov, Ya. B., Leont'yev, B. I., Shelagin, V. M.
and Sazonov, A. Ye.

TITLE: Electron microscope investigation of changes occurring
during the heating of S-containing compounds dissolved
in middle fractions of Volga-region petroleum fuels

PERIODICAL: Zhurnal prikladnoy khimii, v. 35, no. 2, 1962, 394-397

TEXT: The authors studied the formation of a solid phase as the
result of heating middle cuts of petroleum fuels rich in organic S
compounds. This was done to investigate the thermal stability of
such fuels. Samples of a standard fuel TC-1 (TS-1) were desulphur-
ized and then treated with the individual mercaptans, sulphides,
disulphides, thiophanes and thiophenes, normally found in Volga-re-
gion fuels, and also with sulphur-rich concentrates isolated from
the latter. The compounds were added in quantities equivalent to
up to 0.01% of mercaptanic S and up to 0.25% S for the rest. The
solutions were examined under an electron microscope for the pre- ✓

Card 1/2

L 9981-63 EPF(c)/EWT(m)/BDS--AFFTC/APGC--Pr-4--RM/MAY/IW/WW/MN
ACCESSION NR: AP3001313 S/0933/63/005/000/0149/0159

AUTHOR: Chertkov, Ya. B.; Shchagin, V. M.; Zrelov, V. N.

TITLE: Effect of organosulfur compounds on the service properties of TS-1 fuel
[Report presented at the Sixth Scientific Session on the Chemistry of Organosulfur
Compounds of Crude Oil and Petroleum Products, held at Ufa, 27 June - 1 July 1961]

SOURCE: AN SSSR. Bashkirskiy filial. Khimiya seraorganicheskikh soyedineniy,
soderzhashchikhsya v neft'yakh i nefteproduktakh, v. 5, 1963, 149-159

TOPIC TAGS: TS-1, hydrofining, thiols, sulfides, disulfides, thiophanes,
thiophenes, sulfur-containing concentrates, GOST 7149-54, bronze, corrosion,
resinous deposit formation, sediment formation, di-o-tolyl disulfide

ABSTRACT: The effect of organosulfur compounds on the service properties of TS-1
fuels has been studied. The experiments were conducted at 120 to 250C with
hydrofined thermally stable (up to 250C) TS-1 fuel to which 23 individual S
compounds (thiols, sulfides, disulfides, thiophanes, and thiophenes) potentially
present in nonhydrofined fuel were added in amounts permissible under the

Card 1/3

L 9981-63
ACCESSION NR: AP3001313

organosulfur compounds with an increase of the particle size. Orig. art. has: 4 figures and 1 table. 0

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 28May63

ENCL: 00

SUB CODE: 00

NO REF SOV: 000

OTHER: 000

ph/

Card 3/3

ZRELOV, V.N.; MARINCHENKO, M.I.; SHCHAGIN, V.M.; RYBAKOV, K.V.

Chemical composition of trace contaminants in jet fuels made from
sulfur-bearing crude oils. Khim.i tekhn.topl.i masel 8 no.11:
57-61 N '63. (MIRA 16:12)

ZRELOV, V.N.; SHCHAGIN, V.M.; MARINCHENKO, N.I.; RYBAKOV, K.V.

Composition of microcontaminants in T-1 fuel from Azerbaijan pe-
troleums. Nefteper. i neftekhim. 1984-11 103. (MIRA 17:2)

L 1808-66 EWT(m)/EPF(c)/T WE

ACCESSION NR: AP5024384

UR/0286/65/000/015/0067/0067
665.545

AUTHOR: Chertkov, Ya. B.; Zrellov, V. N.; Shchagin, V. M.

TITLE: Method of removing contaminants from [jet] fuels. Class 23, No. 173363

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 15, 1965, 67

TOPIC TAGS: jet fuel, fuel additive, fuel contamination

ABSTRACT: An Author Certificate has been issued for a method of removing minute contaminants from [jet] fuels by filtration. To speed up and improve the effectiveness of the filtration, an additive which coagulates the contaminants is added to the fuel. The additive is octadecylamidoxybutyric acid [sic]. [SM]

ASSOCIATION: none

SUBMITTED: 07Feb63

ENCL: 00

SUB CODE: FP

NO REF SOV: 000

OTHER: 000

ATD PRESS: 411

Card 1/1

1 1963-05 EWT (A) WF
 ACC NR: AP6029039 (A) SOURCE CODE: UR/0413/66/000/014/0055/0055

INVENTOR: Chertkov, Ya. B.; Zrellov, V. N.; Shchagin, V. M.; Fel'dskteyn, M. S.;
Rybakov, K. V.

ORG: none

TITLE: Method of removing minute contaminants from [jet] fuels. ¹¹⁷ Class 23,
 No. 183859 B
46

SOURCE: Izobret prom obraz tov zn, no. 14, 1966, 55

TOPIC TAGS: jet fuel, fuel additive, fuel contamination, ~~coagulant additive~~
coagulation

ABSTRACT: An Author Certificate has been issued for a method of removing minute contaminants from [jet] fuels as per Author Certificate No. 173363 but involving sulfenamide derivatives [unspecified] of 2-benzothiazole as the coagulating additive [Author Certificate No. 173363 concerned a method of removing minute contaminants by filtration, featuring the addition to the fuel of octadecylamidoxylbutyric acid [sic] as a coagulating additive to increase the speed and degree of purification]. [SM]

SUB CODE: 21/ SUBM DATE: 02Nov63/ ATD PRESS: 506/

Card 1/1 *sc/h* UDC: 665.541

MEL'TEVA, N.N.; REZNIICHENKO, V.S.; TUKACHINSKIY, S.Ye.; SHCHAGINA, L.V.

Study of terminal and middle amino groups in native and denatured human serum albumin. Biokhimiia 25 no.2:255-261 Mr-Apr '60.
(MIRA 14:5)

1. Kafedra khimii Leningradskogo instituta sovetskoy torgovli.
(BLOOD PROTEINS)

TEKACHINSKIYY, S.Ye.; SHCHAGINA, L.V.

Aggregation of human serum albumin under conditions of heat denaturation. *Biochimia* 26 no.4:586-591 J1-Ag '61. (MIRA 15:6)

L. Biophysical Laboratory, Institute of Blood Transfusion,
and Laboratory of Physics of Polymers, State University, Leningrad.
(ALBUMIN)

3485

S/190/62/004/005/022/026
B110/B108

27711
AUTHORS: Frisman, E. V., Vorob'yev, V. I., Shchagina, L. V., Yanovskaya, L. K.

TITLE: Flow birefringence in solutions of desoxyribonucleic acid.
I. Optical anisotropy in molecules of native and aggregated denaturated desoxyribonucleic acid

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 5, 1962,
762 - 768

TEXT: The denaturation of desoxyribonucleic acid (DNA) was studied with the aid of flow birefringence. The sodium salt of DNA from the thyroid gland of calf (12.63% L, 7.37% P; N/P = 1.71; E(p) = 6500) was investigated in an optical device with a penumbral compensator (0.0232 λ). Δn and α were determined as functions of the velocity gradient g of the DNA solutions. The relation $(\Delta n / gc \eta)_0_{q \rightarrow 0} = f(c)$ shows that in solutions of native and aggregated denaturated (100°C) DNA, $[\eta]$ changes by a factor of 115, and by a factor of 16. The optical anisotropy of the DNA macromolecule is

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Flow birefringence in solutions of ...

S/190/62/004/005/022/026
B110/B108

scattered by native DNA solutions. On the basis of the mean square distance R^2 between the chain ends, the convolution in the native DNA molecule was found to be $\lambda = L/\sqrt{R^2} \approx 5$. As the lengths of the segments, determined optically and geometrically, differ considerably, further investigations are necessary. There are 3 figures and 1 table. The most important English-language reference is: J. D. Watson, F. H. C. Crick, Nature, 171, 964, 1953.

ASSOCIATION: Fizicheskij institut Leningradskogo gosudarstvennogo universiteta (Physics Institute of the Leningrad State University); Institut tsitologii AN SSSR (Institute of Cytology AS USSR)

SUBMITTED: July 6, 1961

Card 3/3

FRISMAN, E.V.; YANOVSKAYA, N.K.; SHCHAGINA, L.V.; VOROB'YEVA, V.I.;
AKSENOVA, N.N.

Dynamic double refraction of the solution of high-molecular ribo-
nucleic acid. Tsitologiya 4 no.3:323-325 My-Je '62.

(MIRA 16:3)

1. Laboratoriya fiziki polimerov Fizicheskogo instituta Leningrad-
skogo universiteta i Laboratoriya tsitologii zlokachestvennogo
rosta Instituta tsitologii AN SSSR, Leningrad.
(NUCLEIC ACIDS) (REFRACTION, DOUBLE)

4

FRISMAN, E. V., VOROBYEV, V. I., SHCHAGINA, L. V., YANOVKSAIA, N. K. and
AKSENOVA, N. N.

"Dynamic Double Refraction of Nucleic Acid Solutions." pp. 79

Physics Institute of the Leningrad State University, Laboratory of
Cytology of Malignant Growth, and Institute of Cytology of the Academy
of Sciences USSR

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

JPRS 20,634

FRISMAN, E.V.; VOROB'YEV, V.I.; SHCHAGINA, L.V.; YANOVSKAYA, N.K.

Dynamic birefringence in deoxyribonucleic acid (DNA) solutions.
Part 2: Effect of thermal denaturation and ionic strength of the
solution on the structure of DNA macromolecules. Vysokom.soed.
5 no.4:622-627 Ap '63. (MIRA 16:5)

1. Fizicheskiy institut Leningradskogo gosudarstvennogo universiteta
i Institut tsitologii AN SSSR.
(Nucleic acids--Optical properties)

FRISMAN, E.V.; VOROB'YEV, V.I.; YANOVSKAYA, N.K.; SHCHAGINA, L.V.

Studying the molecular structure of ribonucleic acid by the
method of dynamic birefringence. Biokhimiia 28 no.1:137-144
Ja-F '63. (MIRA 16:4)

1. Physical Institute of the State University and Institute
of Cytology, Academy of Sciences of the U.S.S.R., Leningrad.
(NUCLEIC ACIDS) (REFRACTION, DOUBLE)

MEL'TEVA, N.N.; SHCHAGINA, L.V.; FREYMAN, A.A.

Protein substances in cabbage. Report No.2: Determining the functional groups of proteins. Izv.vys.ucheb.zav.; pishch.tekh. no.1:63-65 '64. (MIRA 17:4)

1. Leningradskiy institut sovetskoy trgovli, kafedra organicheskoy i fiziko-kolloidnoy khimii.

ACC NR: AP6033075

SOURCE CODE: UR/0218/66/031/005/1027/1032

AUTHOR: Frisman, E. V.; Shapiro, T. V.; Shchagina, L. V.; Vorob'yev, V. I.

ORG: State University im. A. A. Zhdanova (Gosudarstvennyy universitet); Institute of Cytology, Academy of Sciences, SSSR, Leningrad (Institut tsitologii AN SSSR)

TITLE: Hydrodynamic behavior of nucleic acid molecules in solutions of varying ionic strength

SOURCE: Biokhimiya, v. 31, no. 5, 1966, 1027-1032

TOPIC TAGS: nucleic acid, biochemistry, molecule behavior, physical chemistry, DNA

ABSTRACT: Characteristics viscosity and the dynamic optical constant have been measured for calf thymus DNA as functions of the ionic strength of the solution. Viscosity of native DNA markedly increases with decreasing ionic strength. The data suggest that the size and rigidity of native DNA molecules both increase with decreasing ionic strength of the solution.

SUB CODE: 06/ SUBM DATE: 25Feb66/ ORIG REF: 013/ OTH REF: 023

Card 1/1

UDC: 547.963.3

FILIN'E, B.V.; LRCHAGINA, L.V.; VOROB'YEV, V.I.

Glass rotatory viscosimeter. Koll. zhur. 27 no.1:130-131 Ja-F
'65. (MIRA 18:3)

1. Nauchno-issledovatel'skiy fizicheskiy institut Leningradskogo
universiteta.

GVERDTSZITELI, I. G., KUCHEROV, R. Y. and SHCHAKAYA, V. K.

"Isotope Separation by Diffusion in a Steam Stream."

paper to be presented at 2nd UN Intl. Conf. on the peaceful uses of Atomic Energy, Geneva, 1 - 13 Sept 1958.

CHAPLYGIN, B.K.; SHCHAKHOVA, G.I.

Accelerated propagation of dahlias. Priroda 50 no.9:116-
117 S '61. (MIRA 14:8)

1. Glavnyy botanicheskiy sad AN SSSR (Moskva).
(Dahlias)
(Plant cuttings)

SHCHAMEL', Ye.I.

Comparative evaluation of conspecific stimulants in the
development of antitoxic immunity in tetanus. Report No. 1.
Trudy Irk. NIEM no. 6:34-40 Vol. (MIRA 17:7)

SHCHAMEN', Ye. I.

Immunizing effect of an antigen in a precipitated state. Report No. 2. Trudy Irk. NIEM no. 6:41-47 '61.

Mechanism of the action of nonspecific stimuli on immunogenesis. Report No. 3. Ibid.:48-55

Pathomorphological changes in subcutaneous administration of nonspecific stimulants (experiments on guinea pigs). Report No. 4. Ibid.:56-60 (MIRA 17:7)

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

PELOUSNIKOVA, V. A.; SHCHAMENKO, Ye. I.

Determination of the activity of smallpox vaccine with the aid of antivaccinal serum; author's abstract. Trudy Irk. NIEM no. 6; 135-136 '61. (MIRA 17.7)

1. iz ospennogo otdela Irkutskogo nauchno-issledovatel'skogo instituta epidemiologii i mikrobiologii.

ACCESSION NR: AP4041842

8/0139/64/000/003/0003/0006

AUTHORS: Trikhanova, N. V.; Shchanin, P. M.

TITLE: Simulation of particle motion in crossed electric and magnetic fields

SOURCE: IVUZ. Fizika, no. 3, 1964, 3-6

TOPIC TAGS: accelerator magnetic field, particle accelerator, cyclic accelerator, analog computer, particle trajectory

ABSTRACT: The crossed fields in question arise when it is desired to compensate for the effect of the stray magnetic field on injected particles by applying an electric field. Since the action of the crossed field is difficult to evaluate analytically, the particle motion was simulated with the aid of an IPT-5 analog computer. Both electric and magnetic fields are variable along the direction of motion of the particles. The choice of the scale factors, initial con-

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ACCESSION NR: AP4041842

ditions, and transfer coefficients is discussed. Attempts to improve the output parameters of the particles by varying the distribution of the electric field are described. The analog computer was also used to determine the tolerances for the stability of the electric field and the particle energy. These were found to be $\pm 0.5\%$ for the energy and $\pm 0.1\%$ for the field. Trajectories of the particles which have different initial conditions at the input are determined. It is noted in conclusion that in spite of the errors due to the instability of operation of the analog computer elements, it is possible to rapidly obtain with the computer data on both the particle parameters and on the optimal input unit parameters. Orig. art. has: 4 figures, 4 formulas, and 2 tables.

ASSOCIATION: NII Yadernoy fiziki pri Tomskom politekhnicheskoye institute imeni S. M. Kirova (Scientific Research Institute of Nuclear Physics at the Tomsk Polytechnic Institute)

Cord: 2/5

ACCESSION NR: AP4041842

SUBMITTED: 03Jan63

ENCL: 02

SUB CODE: NP

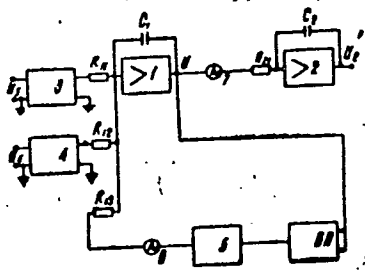
NR REF SOV: 003

OTHER: 000

Card 3/5

ACCESSION NR: AP4041842

ENCLOSURE: 01



Block diagram of model

- 1, 2 - operational amplifiers
- 3, 4, 5 - variable coefficient blocks
- 6, 7 - constant coefficient blocks
- BII - reproduction block

Card 4/5

ACCESSION NR: AP4041842

ENCLOSURE: 02



Oscillogram of particle trajectory and of variation of
particle angular direction

5/5

Card

BULYGIN, I.A.; SHCHANNIKOVA, Z.D.

Interceptive conditioned reflexes from the urinary bladder after
the removal of the thoracic region of the spinal cord. Dokl. AN
SSSR 114 no.5:1120-1123 Je '57. (MLRA 10:9)

1. Institut fiziologii AN BSSR. Predstavleno akademikom K.M. Bykovym.
(CONDITIONED RESPONSE) (BLADDER)