

KOLPAKOV, M.

Not only the training program on traffic regulations by also the driver-education program should be reviewed. Avt.transp. 38 no.11: 51 N '60. (MIRA 13:11)

1. Nachal'nik otdela avtopodgotovki i sporta Tsentral'nogo komiteta Dobrovol'nogo obshchestva sodeystviya armii, aviatsii i flotu SSSR. (Automobile drivers)

KOLPAKOV, M.

Organizations of the Volunteer Society for Assistance to the Army, Air Force and Navy and training of mechanization specialists. Za ru1. 19 no.5:4 My '61. (MIRA 14:7)

1. Nachal'nik otdela avtomotopodgotovki i sporta Tsentral'nogo komiteta Dobrovol'nogo obshchestva sodeystviya armii, aviatsii i flotu SSSR.

(Farm mechanization) (Automobile drivers)

KOLPAKOV, M.

The business of the whole party and all the people. Za rul. 20
no.5:1-2 My '62. (MIRA 16:4)

1. Zamestitel' nachal'nika Upravleniya tekhnicheskoy podgotovki i sporta Tsentral'nogo komiteta Dobrovol'nogo obshchestva sodeystviya armii, aviatsii i flotu.

(Motor vehicles--Societies, etc.)

KOLPAKOV, M. G.

KOLPAKOV, M. G.-- "Concerning Certain Antigen Properties of Hyaluronic Acid of the Intercellular Matter of the Organism."*(Dissertation for Degrees in Science and Engineering Defened at USSR Higher Educational Institutions.) Kazakhstan State Medical Inst imeni V. M. Molotov, Alma-Ata, 1955

SO: Knizhnaya Letopis' No. 25, 18 Jun 55

* For Degree of Candidate in Medical Sciences

KOLPAKOV, M.G.

USSR/General Problems of Pathology. Immunity

U-1

Abs Jour : Ref Zhur - Biol., No 13, 1958, No 60945

Author : Kolpakov M.G.
Inst : Novosibirsk Medical Institute
Title : Haptenic Properties of Hyaluronic Acid

Orig Pub : Tr. Novosibirskogo med. in-ta, 1957, 27, 115-123

Abstract : The serum of rabbits immunized with an extract of human skin (complex tissue antigen consisting of a protein base and related polysaccharides group - hyaluronic acid I), acquired the ability to participate in the reaction of the blood serum with the tissue antigen and with I freed of proteins, and obtained from a human umbilical cord. An immunization of rabbits with this compound did not cause a formation of antibodies. Thus, it has been demonstrated that I is a hapten.

Card : 1/1

KOLPAKOV M.G.

ABS. JOUR. : REBiol., No. 12 1958, No. 56260

AUTHOR : Kolpakov, M.G.
INST. : Novosibirsk Medical Institute
TITLE : The Pathophysiological Significance of Hyaluronic Acid

ORIG. PUB. : Tr. Novosibirskogo Med. In-ta, 1957, Vol.27, 124-137

ABSTRACT : Rabbits, sensitized with an extract of human skin containing hyaluronic acid (I), reacted to the injection 11-15 days later of a challenging dose (hapten) with an increase in the amplitude and frequency of respirations and elevation of the blood pressure, frequently on a background of motor restlessness. I specifically desensitized rabbits to the subsequent injection (45-50 minutes later) of the complete skin antigen. Hence, due to its properties as a hapten, I elicited changes in the reactivity of the organism. -- F.L. Bukh

CARD: 1/1

AUTHOR: Kolpakov, M. G.

SOV/20-121-4-51/54

TITLE: The Protein Composition of Blood in the Case of Anaphylaxis of Rabbits (Belkovyy sostav krovi pri anafilaksii u krolikov)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 121, Nr 4, pp. 759-761 (USSR)

ABSTRACT: By means of electrophoretical investigations and the application of labelled atoms it was possible to prove that the proteins of the blood plasma are highly active substances containing antibodies, vitamins, hormones and catalysts (Refs 6, 8, 10 and others). It was to be expected that in the case of an anaphylactic shock, in connection with which marked hemodynamic disturbances of metabolism occur the amount of individual protein fractions will also be disturbed. The author determined the entire amount of protein and the single fractions in the blood of 20 rabbits which had been desensitized before the inoculation of horse serum and during the anaphylactic shock. The animals were sensitized according to the method of E. Ya. Kladnitskaya (Ref 4). From table 1 can be seen that the protein content in the blood is hardly at all changed during the shock. The

Card 1/3

SOV/20-121-4-51/54

The Protein Composition of Blood in the Case of Anaphylaxis of Rabbits

separation of the animals with respect to reaction variants proved that the average numbers sometimes hide diametrically opposed changes. In the case of 5 rabbits a reaction type was found which the author calls variant A (Table 2 and Fig 1 A). The decrease of the entire amount of blood proteins was characteristic for it. This decrease on the whole took place at the expense of albumines and β -globulines whereas the amount of α - and γ -globulines remained unchanged. All rabbits of this variant remained alive although 4 of them suffered from a severe shock and the blood pressure fell to 60-40 mm torr. The variant B has 2 subdivisions: B_1 with 7 and B_2 with 8 animals (Table 3 and Fig 1 B). A rapid increase of the β -globulines and a slight increase of albumine was a characteristic feature of B_1 . The entire amount of protein even increases somewhat. It mainly takes place at the expense of the γ^2 -globulines (Table 4 and Fig 1 C). 4 animals of the variant B_1 and 2 of the variant B_2 died. Thus a dependence between the character of change of the protein content in the blood and the

Card 2/3

SOV/20-121-4-51/54

The Protein Composition of Blood in the Case of Anaphylaxis of Rabbits

development of the anaphylactic reaction was suggested.
There are 1 figure, 4 tables, and 11 references, 7 of which
are Soviet.

ASSOCIATION: Novosibirskiy gosudarstvennyy meditsinskiy institut
(Novosibirsk State Medical Institute)

PRESENTED: April 17, 1958, by N. N. Anichkov, Member, Academy of Sciences,
USSR

SUBMITTED: February 26, 1958

Card 3/3

KOLPAKOV, M.G.; ZHDANOVA, V.G., student; SHUSHPANNIKOVA, O.V., student
(Novosibirsk)

Effect of heparin on anaphylaxis. Pat.fiziol. i eksp.terap.
3 no.2:69 Mr-Apr '59. (MIRA 12:6)

1. Iz kafedry patologicheskoy fiziologii (zav. - dotsent G.L.
Lyuban) Novosibirskogo meditsinskogo instituta.

(ALLERGY, exper.
anaphylaxis. eff. of heparin in rabbits (Rus))
(HEPARIN, eff.
on anaphylaxis in rabbits (Rus))

KOLPAKOV, M.G.; POLYAK, M.G.; YAKOBSON, G.S.

Role of the adrenals in the restoration of vital functions following clinical death. *Biul. eksp. biol. i med.* 47 no.3:21-27 Mr '59. (MIRA 12:7)

1. Iz kafedry patologicheskoy fiziologii (zav. - dotsent G. L. Lyuban) Novosibirskogo meditsinskogo instituta (dir. - prof. G. S. Zaleskiy) Predstavlena deyatvitel'nyy chlenom AMN SSSR V. N. Chernigovskim.

(RESUSCITATION,

eff. of adrenalectomy on restoration of vital funct. after clin. death in exsanguinated animals (Rus))

(ADRENALECTOMY, effects,

on restoration of vital funct. after clin. death in exsanguinated animals (Rus))

KOLPAKOV, M.G.

Work of the third plenary session of the Siberian branch of the All-
Union of Pathophysiologists. Pat.fiziol.i eksp.terap. 4 no.2:90-
91 Mr-Ap '60. (MIRA 14:5)

(PATHOPHYSIOLOGICAL SOCIETIES)

KOLPAKOV, M.G.

Role of the adrenopituitary system in the restoration of vital functions after clinical death. Biul. eksp. biol. i med. 51 no.4: 32-39 Ap '61. (MIRA 14:8)

1. Iz kursa patologicheskoy fiziologii i laboratornoy diagnostiki (zav. - dotsent M.G. Kolpakov) Stalinskogo instituta usovershenstvovaniya deystvitel'nym chlenom AMN SSSR A.V. Lebedinskim.
(RESUSCITATION) (ENDOCRINE GLANDS)
(DEATH)

KOLPAKOV, M.G.

Changes in the protein composition of blood plasma following clinical death caused by hemorrhage. Dokl. AN SSSR 138 no. 4: 979-981 Je 161. (MIRA 14:5)

1. Stalinskiy gosudarstvennyy institut usovershenstvovaniya vrachey.
Predstavleno akademikom A. N. Bakulevym.
(BLOOD PROTEINS) (DEATH, APPARENT)

KOLPAKOV, M.G. (Stalinsk)

Influence of cortisone and desoxycorticosterone on the restoration of vital functions following clinical death caused by rapid and slow hemorrhage. Pat. fiziol. i eksp. terap. 5 no.4:16-19 JI-Ag '61. (MIRA 14:9)

1. Kurs patofiziologii i laboratornoy diagnostiki (zav. - dotsent M.G.Kolpakov) Institut usovershenstvovaniya vrachey.
(CORTISONE) (CORTICOSTERONE) (HEMORRHAGE)
(DEATH) (METABOLISM)

KOLPAKOV, M.G.; FEDENKOV, V.I.; SHUSHPANNIKOVA, O.V. (Novokuznetsk)

Pathogenesis of the eosinopenic reaction of terminal states.
Report No.1. Probl.endok.i gorm. no.4:19-23 '62. (MIRA 15:11)

1. Iz kursa patofiziologii i laboratornoy diagnostiki (zav. -
dotsent M.G. Kolpakov) Novokuznetskogo instituta usovershenst-
vovaniya vrachey (dir. - dotsent G.L. Starkov).
(EOSINOPHILES) (HYPOPHYSECTOMY) (DEATH, APPARENT)

KOLPAKOV, M.G.; POTEKHIN, K.G.; FEDENKOV, V.I.

Mechanism of the eosinopenic reaction in terminal states. Biul.
eksp.biol.i med. 54 no.11:36-39 N '62. (MIRA 15:12)

1. Iz kursa patologicheskoy fizologii i laboratornoy diagnostiki
(zav. - dotsent M.G.Kolpakov) Novokuznetskogo instituta usover-
shenstvovaniya vrachey. Predstavlena akademikom V.N.Chernigovskim.
(EOSINOPHILES) (DEATH, APPARENT)

KOLPAKOV, Mikhail Grigor'yevich; SHAPIRO, V.M., red.

[Adrenal glands and reanimation] Nadpochechniki i reanimatsiia. Moskva, Meditsina, 1964. 159 p. (MIRA 17:8)

L 1599-66

DR/0219/64/058/009/0062/0066

ACCESSION NR: AP5024772

AUTHOR: Kolpakov, M. G.; Titova, K. T.

TITLE: Effect of adrenal glands on the enzymatic activity of the blood and tissues in resuscitation

SOURCE: Byulleten' eksperimental'noy biologii i meditsiny, v. 58, no. 9, 1964, 62-66

TOPIC TAGS: hematology, endocrinology, blood, autotransplantation, gland, enzyme

ABSTRACT: The aldolase and glutathione activity of the blood, cardiac muscle and liver of cats resuscitated after a fatal blood loss were studied. The cats were variously intact, adrenal-ectomized, and with autotransplanted adrenals.

In resuscitation of intact animals, there was an increase of aldolase in the blood and concomitant reduction in the liver but no observable change in the heart. Glutathione content increased in the blood and remained unchanged in the tissues. In dying and resuscitated adrenalectomized cats, the aldolase and glutathione activity of the blood remained unchanged. In the

Card 1/2

L 1599-66

ACCESSION NR: AP5024772

animals with autotransplanted adrenals, the blood aldolase activity reached control levels during resuscitation while the glutathione content increased somewhat.

It is concluded that the results obtained are related to the varying degree of exclusion of the corticosteroid function resulting from adrenalectomy and autotransplantation of the adrenals. The results also show the close relation of the course of enzymatic adaptive reactions to the functional state of the adrenal cortex, and indicate the advisability of investigating the possibility of using the stimulating effect of corticosteroid compounds on enzymatic transformations during resuscitation. Orig. art. has: 3 tables.

ASSOCIATION: Novokuznetskiy institut usovershenstvovaniya vrachey (Novokuznetsk Institute for the Advanced Training of Physicians)

SUBMITTED: 22Mar63

ENCL: 00

SUB CODE: LS

NR REF SOV: 018

OTHER: 007

JPRS

Card 2/2 *DF*

KOLPAKOV, M.I.

Expanding self-active automobile and motorcycle clubs. Za rul.
16 no.11:4-5 N '58. (MIRA 12:1)

1. Nachal'nik otдела avtemotopodgotovki i sperta Upravleniya
Protivovozdushnoy oborony itekhnicheskoy podgotovki Tsentral'nogo
komiteta Dobrovel'nogo obshchestva sedeystviya armii, aviatsii i
flotu SSSR.

(Automobiles--Societies, etc.)

(Motorcycles--Societies, etc.)

SOV-120-58-1-8/43

AUTHORS: Zhdanov, A.P., Kolpakov, M.I., Kuz'min, V.N., Raguzin, R.M.,
Fedotov, P.I.

TITLE: An Instrument for Measuring the Gap Lengths in the Tracks
for Particles in Photo-Emulsions (Pribor dlya izmereniya
prosvetov v trekakh chastits v fotoemul'siyakh)

PERIODICAL: Pribory i Tekhnika Eksperimenta, 1958, Nr 1, pp 46-47
(USSR)

ABSTRACT: The instrument is in the form of an eye-piece in whose
field of view one sees a scale, a pair of parallel lines
and the usual crosswire. The cross wire is set parallel to
the track and the gap defined by the two parallel wires is
moved along the track. This motion is achieved by means of
the two micrometers shown in Fig.2. The motion of the two
micrometers is independent of each other. There are 2
diagrams, no tables and 3 references, one of which is English

Card 1/2

SOV-120-58-1-8/43

An Instrument for Measuring the Gap Lengths in the Tracks for
Particles in Photo-Emulsions.

and 2 Soviet.

ASSOCIATION: Radiyevyy institut AN SSSR (Radium Institute of the
Academy of Sciences, USSR)

SUBMITTED: June 22, 1957.

1. Particles--Photographic analysis
2. Particles--Penetration
3. Measurement
4. Optical instruments--Applications

Card 2/2

1. KOLPAKOV, N. A., Eng.
2. USSR (600)
4. Radiators - Testing
7. Installation for assembly and pressure testing of radiators. *Riul. stroi. tekhn.* 10, No. 7, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

KOLPAKOV, N.E.

Correlation couplings in nonlinear circuits with fluctuating
parameters. Radiotekh. i elektron. 8 no.9:1499-1505 S '63.
(MIRA 16:9)

(Electric networks) (Automatic control)

KOEPAKOV *N. M.*

28942

N. m. i orlova, a. v. tri eamyechatyel'nykh karstovykh istochnika khryebta karatau v yuzhnom kaeakhstanye. Priroda, 1949, No. 9, c. 47-50.

So: Letopis' No. 34

KOLPAKOV, N.M., inzh.

Using calculating machines in controlling and managing
production processes. Mekh.i avtom.proizv. 16 no.10:51-53
0 '62. (MIRA 15:11)
(Industrial management) (Calculating machines)

WRITE BELOW THIS LINE

ACCESSION NR: AP4042923

S/0057/64/034/008/1387/1391

AUTHOR: Kolpakov, O. A.; Kotov, V. I.

TITLE: Radiation of a charge passing through a cylindrical resonator

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 34, no. 8, 1964, 1387-1391

TOPIC TAGS: charged particle radiation, field radiation, electromagnetic resonator

ABSTRACT: The radiation of separate waves and the total radiation generated by a charged particle passing through a cylindrical resonator with inlet and exit openings have been evaluated. The evaluation was based on determination of the energy of the electromagnetic field appearing during the passage of a charged beam through a cylindrical resonator. From a geometrical point of view, the beam was assumed to be a charged filament, its axis and direction of motion coinciding with the axis of the resonator. The velocity of the beam was assumed to be constant and the resonator to be electrically insulated from the outside space. When a beam of
Card 1/2

ACCESSION NR: AP4042923

charged particles passes through a resonator, waves of all harmonics are generated. In the relativistic case, the contributions of higher harmonics may be essential. The induced field was found by solving inhomogeneous wave equations by means of a method presented by V. M. Lopukhin (Vozbuzhdeniye elektromagnitnykh kolebaniy i voln elektronnyimi potokami. Gostekhizdat, M., 1953). Dnestrovskiy and Kostomarov obtained a formula for determining the radiation due to flight of a charge through an opening in an infinite screen. The authors present a simpler way for obtaining like results. The authors express gratitude to B. M. Bolotovskiy for a series of useful suggestions expressed during discussion of the work. Orig. art. has: 18 formulas.

ASSOCIATION: None

SUBMITTED: 27Jul63

ATD PRESS: 3090

ENCL: 00

SUB CODE: NP, EC

NO REF SOV: 006

OTHER: 000

Card 2/2

Doc ID: A6003232

Doc ID: A6003232

S/0057/65/035/001/0026/0034

Author: Kolpakov, O.A. / Kotov V.I. / Om-San-Kha

24

Journal: zhurnal tekhnicheskoy fiziki, v.35, no.1, 1965, 20-34

1
B

Subject: mathematical physics, dispersion relation, electromagnetic wave emission, waveguide, iris waveguide, slotted waveguide

The dispersion equation is derived for the propagation of long wave-
length waves in a periodic waveguide of circular cross section. The longitudi-
nal cross-section of the waveguide discussed is shown in the figure (Enclosure 01). The
radiation emitted by a charged particle moving on the axis of the waveguide is also
discussed. The dispersion equation is obtained in the form of an infinite series
which is simplified for the cases of an iris waveguide ($D = d, a > d$) and a
chain of coupled resonators ($D = d, a \ll d$). The expressions obtained for the
width of the pass band in these cases agree with those given by V.V. Vladimirov
(1969, 1277, 1947), but the derivation is said to be much simpler. An ex-
pression is derived for the power radiated by a charged particle moving on the
axis of a slotted waveguide ($D \gg d$). "In conclusion" the authors express their

NR: AP5003232

tribute to Academician V.I.Veksler for his constant interest in the work,
P.M.Bolotovskiy for a number of valuable remarks in discussions of the
fig.art.has: 47 formulas, 1 figure and 1 table.

CLASSIFICATION: none

DATE: 28Feb64

ENCL: 01

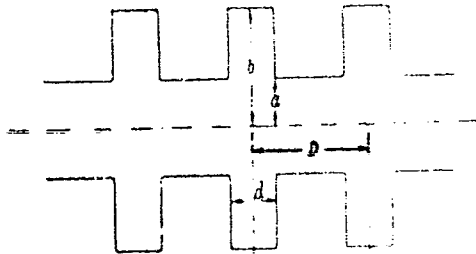
SUB CODE:EC

CLASS: 008

OTHER: 001

AP5003232

ENCLOSURE: 01



Longitudinal section of the waveguide

L 13436-66 EWT(1) IJP(c)

ACC NR: AP6002436

SOURCE CODE: UR/0057/65/035/012/2150/2153

AUTHOR: Kolpakov, O.A.; Kotov, V.I.

ORG: none

TITLE: Radiation of a ^{21,44,55} magnetic dipole moving through a cylindrical resonator or a structured waveguide

SOURCE: Zhurnal tekhnicheskoy fiziki, v.35, no. 12, 1965, 2150-2153

TOPIC TAGS: ~~electromagnetic wave~~, magnetic dipole, resonator, waveguide, radiation, ~~plane radiation~~

ABSTRACT: The authors calculate the radiation of a magnetic dipole moving parallel to its dipole moment along the axis of an open cylindrical resonator, along the axis of a slotted waveguide consisting of a sequence of identical equally spaced rings, or through a circular opening in an infinite plane conducting sheet. The work is a continuation of earlier work of the authors (ZhTF, 34, 1387, 1964) and of the authors and Om Sang Ha (ZhTF, 35, 26, 1965) on the radiation of a point charge under similar circumstances. The mathematical treatment is similar to that employed in the references cited and is not described in detail in the present paper. Expressions are given for the Fourier components of the radiated energy. The magnetic dipole excites TE, rather than TM modes, in the resonator. On traversing the cylindrical resonator the magnetic dipole radiates relatively more energy into the higher frequencies than does a point

Card 1/2

UDC: 538.561

Card 2/2

KOLPAKOV, O.V.

At the Central Chemical Laboratory of the Main Geological-Prospecting Administration of Uzbekistan. Zav.lab. 28 no.8:1014-1015 '62. (MIRA 15:11)

1. Nachal'nik Tsentral'noy khimicheskoy laboratorii Glavnogo upravleniya geologii i okhrany nadr pri Sovete Ministrov Uzbekskoy SSR.

(Uzbekistan--Chemical laboratories)

KOLPAKOV, P.

Device for removing and installing transmission gear box of ZIS -
- 150 and ZIS - 5 automobiles. Avt.transp.32 no.11:36 N '54.
(Automobiles--Transmission devices) (MLRA 8:3)

SOV/137-57-11-21378

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 11, p 104 (USSR)

AUTHOR: Kolpakov, P. A.

TITLE: Making Steel Shapes by Hot Extrusion (O proizvodstve stal'nykh profiley metodom goryachego pressovaniya)

PERIODICAL: V sb.: Ratsionalizatsiya profiley prokata. Moscow, Profizdat, 1956, pp 361-363

ABSTRACT: Omnidirectional compression, which makes it possible to shape heat-resistant steels that under normal conditions are virtually immune to pressworking, is the basis of the positive aspect of this extrusion (E) process. For short runs this method is more economical than rolling. The metallurgical plants of the aircraft industry extrude steel shapes of complex configuration on 75-1000-3500 t presses with drafts of 5 to 12 for heat-resistant steel, and 10-35 for carbon steel. Difficulties in the development of the E process in connection with the low strength of the tool are observed. The facing of dies with stellite and the use of fiberglass as coating in E makes it possible to increase the life of the tool to 25-40 extrusions of carbon steel, and up to 5-15 E for alloy steel. An important

Card 1/2

SOV/137-57-11-21378

Making Steel Shapes by Hot Extrusion

role in increasing tool life is played by reduction in scale formation on heating. The dual heating in an electric furnace and a Va-Cl bath now practiced is scheduled to be replaced by electric induction heating in the future.

V. Ya.

Card 2/2

KOLPAKOV, F. M.

USSR/Electronics

Card 1/1 : Pub. 133 - 6/20

Authors : Lokshin, A. M., and Kolpakov, F. M.

Title : The selection of cathode chock coils and capacitors for a stage-coupling of transmitters, designed on an inversion diagram

Periodical : Vest. svyazi 10, page 11, Oct 54

Abstract : A description is presented of methods for calculating the inductance of cathode chock coils and coupling capacitors used in short-wave transmitters. Diagrams; graph.

Institution : ...

Submitted : ...

KOLPAKOV, P.M., inzhener.

Eliminating choke coil parasitic oscillations in transmitters.
Vest. svyazi 16 no.12:27 D '56. (MLRA 10:2)

(Radio--Transmitters and transmission)

YASTREBOV, P.V.; KOLPAKOV, P.S.; ZAYKO, V.P.; GOLEV, A.K.

Manufacture of low-carbon ferrochromium. Stal' 25 no.10;
917-919 0 '65. (MIRA 18:11)

KOLPAKOV, P. Ye

PA 19473

USSR/Astronomy - Sunspot field Nov/Dec 51

"Propagation of the Electromagnetic Field of Sunspots in the Sun's Atmosphere," P. Ye. Kolpakov, Kirov State Pedagogic Inst Izmest Lenin

"Astron Zhur" Vol XVIII, No 6, pp 443-449

Former belief that conducting solar atm shields electromagnetic fields and bars their entry into upper atm is found erroneous. Shows that chromospheric and corona matter moves easily during electromagnetic processes, and constitutes macroscopic shifts which reduce the conductivity. Therefore

USSR/Astronomy - Sunspot field 19473
(Contd)

the magnetic field of sunspots can propagate without attenuation into upper layers of solar atm. Authors thank Prof Ya. P. Terletskiy and B. B. Pikeiner for their advice.

Handwritten notes: 19473, 19473, 19473

19473

KOLPAKOV, P. Ye.

PA 175T4

USSR/Astronomy - Astrophysics, Solar 11 Jan 51
Electromagnetic Fields

"Problem of Propagation of Electromagnetic Spot
Field Within the Solar Atmosphere," P. E. Koipa-
kov, Ya. P. Terletskiy, Moscow State U imeni Lo-
monosov

"Dok Ak Nauk SSSR" Vol LXXVI, No 2, pp 185-188

Despite strong ionization of solar atm, computa-
tion and observed phenomena prove propagation of
electromagnetic fld within atm, inducing motion of
chromospheric material and protuberances.

175T4

KOLPAKOV, P. YE.

FA 239T72

USSR/Astronomy - Solar Corona

Nov/Dec 52

"Nature of Coronal Regions," P. Ye. Kolpakov

"Astron Zhur" Vol 29, No 6, pp 638-648

Discusses problem of electromagnetic origin of solar coronal regions, assumed to produce corpuscular beams and radio emission. Indebted to Ya. P. Terletskiy and S. B. Pikelner.

239T72

AUTHOR: Kolpakov, P. Ye.

TITLE: The acceleration of charged particles in the electromagnetic field of Sun-spots. (K voprosu uskoreniya zaryazhennykh chastits v elektromagnitnom pole solnechnykh pyaten).

PERIODICAL: "Astronomicheskii Zhurnal" (Journal of Astronomy), 1957, Vol.34, No.2, pp. 222-232 (USSR).

ABSTRACT: Observational data suggest that charged particles (ions and electrons) exist in the solar atmosphere. Their number varies with time, and their energies are 10^5 - 10^6 eV and often as much as 10^9 eV. The following are some of the facts that support this conclusion.

1. When an active group of sun-spots passes the central meridian of the solar disc a sporadic radio-emission takes place. This consists of radiation connected with the spots themselves, and also of "radio-flashes" which have a duration of 1 sec. to a few minutes. Metre waves are emitted by small sections of the corona neighbouring the sun-spots, and also by regions directly above the spots at a height of 25 000 - 70 000 km or more from the photosphere. The radiation temperature of the emitting regions is of the order of 10^8 - 10^9 degrees. The radiation temperature of the Sun during major "radioflashes" reaches 10^{10} degrees. Recently, a number of authors have argued that at least part of the sporadic radio-emission of the Sun is due to relativistic electrons moving in the

The acceleration of charged particles in the electromagnetic field of Sun-spots. (Cont.)
magnetic field of the solar atmosphere. (1 - 5).

2. An analysis (6, 7) of the changes in the cosmic radiation connected with solar activity leads to the following conclusions. Solar activity changes the energy of the primary particles of cosmic rays, and, secondly, the Sun itself appears to be a source of a small part of cosmic rays.

3. It is known that the appearance of a chromospheric flare in an active area and near the central meridian of the solar disc, is often accompanied by magnetic storms on the Earth and also by ionospheric disturbances. Thus, chromospheric flares are accompanied not only by radio-flashes and a change in the intensity of the primary component of cosmic rays, but also by the emission of corpuscular streams. These particles have high (but not cosmic) energies.

4. Recent work (3, 8, 9, 10) has shown that the Sun emits rays with $\lambda \sim 7 \div 100 \text{ \AA}$. It has been estimated that this radiation can be accounted for as due to relativistic electrons if one assumes that:-

- density of electrons = 250 per c.c.
- energy of electrons $\sim 5 \times 10^9 \text{ eV}$.
- magnetic field $\sim 10 \text{ Oersted}$.
- linear dimensions of radiating region in $\sim 10^{10} \text{ cm}$.
- the corona.

The acceleration of charged particles in the electro-magnetic field of Sun-spots. (Cont.)

It is assumed that each unipolar spot can be assigned a dipole moment. The magnetic field due to each such dipole can be written down and as the magnetic field increases the associated electric field can be computed. It is shown that for a non-relativistic charged particle the acceleration due to the component of the electric field which is perpendicular to the magnetic field leads to an increase in the energy of the particle given by:

$$w_1 - w_{01} = w_{01} \left(\frac{H}{H_0} - 1 \right)$$

If the field before the appearance of the spot is $H_0 \sim 1 - 3$ Oe. and the maximum magnetic field at the centre of the spot $H \sim 10^3$, then the energy of non-relativistic particles can increase by a maximal factor of 10^3 . It is shown that this mechanism can lead to the appearance of particles with energies of the order of 1 MeV. Energy losses due to deceleration by plasma, the ionisation and excitation of atoms, the inverse Compton effect, and radiation in a magnetic field, result in the fact that only those electrons which have an initial energy in excess of a certain

3(1)

AUTHOR:

Kolpakov, P. Ye.

SOV/33-36-1-8/31

TITLE:

On the Generation of Corpuscular Streams by the Magnetic Fields of Sunspots

PERIODICAL:

Astronomicheskii zhurnal, 1959, Vol 36, Nr 1, pp 65-72 (USSR)

ABSTRACT:

The author considers the possibility of generation of corpuscular streams in an increasing with time non-uniform magnetic field of a unipolar group of sunspots. The most rapid particles of the coronal-chromospheric plasma belonging to the "wing" of the Maxwell distribution, for which the condition $eE_{\perp} \geq F_{\text{dec}}$ is fulfilled, will acquire energy from the action of the induced electric field according to $W_{\perp} = W_{\parallel} \frac{H}{H_0} \sim 6 \cdot 10^3 \div 4 \cdot 10^5$ eV.

Because of the non-uniformity of the magnetic field these particles will rise upwards and their energy W_{\perp} will be transformed into the energy W_{\parallel} of motion along the magnetic lines

Card 1/2

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000824010005-1

On the Generation of Corpuscular Streams by the
Magnetic Fields of Sunspots

SOV/33-36-1-8/31

of force of the spot. Particles with energy $W_{\parallel} \sim 6 \cdot 10^3 \div 4 \cdot 10^5$ eV in the region of the corona can escape from the sun and form corpuscular streams. There are 2 figures, and 10 references, 5 of which are Soviet, 2 English, 2 American, and 1 German.

SUBMITTED: November 2, 1957 (initially)
April 30, 1958 (after revision)

Card 2/2

KOLPAKOV, S.

"Guide to arthropods harmful to man." Edited by V.N.Beklemishev.
Reviewed by S. Kolpakov. Zhur. mikrobiol. epid i immun. 31 no.6:
140-141 Je '60. (MIRA 13:8)
(ARTHROPODA) (BEKLEMISHEV, V.N.)

I. 15696-63 EPR/EWP(j)/EPF(c)/FWT(m)/BES/ES(v)/ES(w)-2 AFFTC/ASD/
EED e-L/Pab-L/Is-L/Pc-L/Pr-L RM/nd

ACCESSION NR: AR3003602

S/0021/63/000/008/0706/0706

SOURCE: RZh. Khimiya, Abs. 8T267

83

AUTHOR: Kolpakov, S. V.

TITLE: Investigation of the mechanical properties of the new structural material form-sheet PS-B

ORIG SOURCE: Tr. Zap.-Sib. fil. Akad. str-va i arkhitekt. SSSR vy*p. 6.

TOPIC TAGS: foam sheet characteristic

DESCRIPTION OF ABSTRACT: ¹⁵ Foam sheet is used as a heat and sound-proofing material combined with structural ones. It is used in three-ply construction of walls and coverings for industrial, domestic, and public buildings with a medium layer of form-sheet. For the investigation of the mechanical properties of PS-B, experiments were conducted on the shear, compression, and elongation under momentary and prolonged loads.

Card 1/2

L 15696-63

ACCESSION NR: AR3003602

The method of the experiments was analyzed. As a result of the investigations of the mechanical properties of PS-B, the character of the deformation and collapse under momentary and prolonged loads was observed, as well as the dependence of strength on the time of operation of the load. The prolonged strength of PS-B under shear and elongation stresses is determined by the stress, which guarantees performance of the material over time without collapse with noticeable fatigue deformations. The prolonged strength of PS-B under compression is characterized by a stress which provides negligible fatigue deformation and the performance of the material over time. According to the results of experimental investigation on samples of PS-B, the value of the limit of prolonged strength for the shear, compression, and elongation is equal to 0.3-0.4 of the shear time (τ_{sub} time). T. Danilova

DATE ACQ: 12Jun63

SUB CODE: MA

ENCL: 00

Card 2/2

KOLPAKOV, S.V.

Strain of foam plastics in a shear stress under loads of short
and long duration. Plast.massy no.2:59-63 '62. (MIRA 15:2)
(Plastics--Testing)

S/032/62/028/009/006/009
B104/B102

AUTHORS: Panferov, K. V., and Kolpakov, S. V.

TITLE: A method for torsional tests of foam plastics

PERIODICAL: Zavodskaya laboratoriya, v. 28, no. 9, 1962, 1121 - 1122

TEXT: To achieve a more uniform distribution of the tangential stress in foam plastics samples during torsional tests the authors substituted cylindrical for rectangular samples. The samples have an outer diameter of 75 mm, a wall thickness of 20 mm and a height of 50 - 80 mm, depending on the thickness of the material. For short-time torsion tests these samples are fixed by epoxide clamps in a K-6(K-6) testing machine and loaded at a rate of 1-1.5 kgm/min. The angle of torsion can be read off. During the tests, ПС-1 (PS-1), ПХВ-1 (PKhV-1), ПС-Б (PS-B) plastics and foam-polyurethane fractures like brittle materials; the fractures being helical. The ПС-4 (PS-4) foam plastics formed necks in the central portion. For long-time tests a large disc (250 mm diameter), with a grooved periphery is attached to the front of the cylindrical specimen so as to load it with a constant torque produced by a weight hanging from a thread, wound around

Card 1/2

S/191/62/000/010/008/010
B101/B18615.1510
AUTHOR:

Kolpakov, S. V.

TITLE:

Resistance of foam plastics to compressive fatigue loads
of long-duration

PERIODICAL: Plasticheskiye massy, no. 10, 1962, 49 - 51

TEXT: Endurance tests to determine the compression strength σ_{compr} and the critical strength σ_{crit} of ПС-1 (PS-1), ПС-4 (PS-4), ПЭ-1 (PKhV-1), and of ПС-Б (PS-B) plastics with the volume weights of 109 kg/m³, 39.2 kg/m³, 103.0 kg/m³, and 67 - 100 kg/m³ using a Schopper press at a load of 50-250 kg and a load rate of 40 kg/min. were conducted under the direction of K. V. Panferov. For the method of determination, and the definition of σ_{crit} see Yu. M. Ivanov, DAN SSSR, 19, no. 6 - 7 (1938) and S. V. Kolpakov, Plast. massy, no. 2 (1962). The fatigue load was 0.15 - 0.6 σ_{crit} ; greater loads produced a deformation >20% already after 24 hrs. Results: At

Card 1/2

125-25-63

ENP(j)/EPF(c)/EWT(m)/BDS

AFFTC/ASD

Pc-4/Pr-4

RM/vw

ACCESSION NR: AR3003601

S/0081/63/000/002/0705/0706

SOURCE: RZh. Khimiya, Abs. 8T266

68
66

AUTHOR: Panferov, K. V.; Kolpakov, S. V.

TITLE: Mechanical properties of foam sheets with consideration of the factor of time

CITED SOURCE: Tr. Tsentr. n.-i. in-ta stroit. konstruksiy. Akad. str.-va i arkhitekt. SSSR, vy*p. 11, 1962, 355-378

TOPIC TAGS: foam sheet strength, foam sheet

TRANSLATION OF ABSTRACT: Investigations were conducted for the determination of the strength characteristics of foam sheets (FS), which are necessary for the planning and design of building structures using FS in triple-ply honeycomb panels (THP). On the basis of an analysis of the working conditions of THP, the conclusion was: the chief stresses in structure with honeycomb filler are a shear and compression stress. It was shown that the data on strength characteristics, obtained by momentary loads, cannot be used as the calculated charac-

Card 1/2

L 15695-63

ACCESSION NR: AR3007601

2
characteristics of real structures. With the aim of clarifying the shear strength (SS) and compression strength (CS) under conditions of prolonged loads the form of the sample and the method of testing were worked out. In testing samples for SS and CS, steps were taken to eliminate warping of the samples in the experimental devices. FS of types PS-1, PS-4, and PKhV-1 were tested. On the basis of experiments with momentary and prolonged loads on samples of FS, norms strengths were suggested, for materials of various kinds and specific gravity: for momentary stress -- for PS-4 (sp. gr. 40 kg/cu m) for compression and shear-2 kg/sq cm; for PS-1 and PKhV-1 (sp. gr. 100 kg/cu m) for compression-9 kg/sq cm, and for shear-7 kg/sq cm; for prolonged loads and relatively low deformations -- for PS-4 for compression and shear-0.7 kg/sq cm; for PS-1 and PKhV-1 for compression-2.5 kg/sq cm and for shear-2 kg/sq cm. Z. Ivanova

DATE ACQ: 12Jun63

SUB CODE: MA

ENCL: 00

Card 2/2

S/804/62/000/011/004/005

AUTHORS: Panferov, K. V., Candidate of Technical Sciences, Kolpakov, S. V.,
Engineer.

TITLE: The mechanical properties of foam-plastics and their time dependence.

SOURCE: Akademiya stroitel'stva i arkhitektury SSSR. Institut stroitel'nykh
konstruktsiy. Trudy. no.11. Moscow. 1962. Issledovaniya konstruktiv-
nykh plastmass i stroitel'nykh konstruktsiy na ikh osnove. pp.355-378.

TEXT: The paper comprises a literature survey and a report on lab tests.
Following a review of foreign literature and foreign manufacturing practice it is
reported that currently the USSR produces by the press method the foam plastics
(FP) ПС-1 (PS-1) and PS-4, based on polystyrene, and the FP ПХВ-1 (PKhV-1)
based on polyvinylchloride with a unit weight of 40-230 kg/m³. The non-press
method of making polystyrene FP ПСБ (PSB) is under development, with a 1965
production goal of 200,000 m³. The production of foam polyurethanes shows
marked growth. Costs are being reduced appreciably, and practical use in building
construction is on the rise. It is proposed that in its use as the central layer in
three-layer structural panels, the FP's should serve not only as heat- and sound-
insulators, but should also be utilized as a structural and strength-giving member.

Card 1/4

The mechanical properties of foam-plastics ...

S/804/62/000/011/004/005

To the knowledge of the authors, no long-term (LT) strength data were available by February 1960, and lab tests were undertaken on PS-1, PS-4, and PKhV-1 specimens. Shear tests: Current All-Union Standards (GOST) do not provide for a shear-testing methodology. The existing instruction no.410-52, which provides for torque tests of square specimens, is found lacking since it does not eliminate normal stresses, introduces nonuniformities, and is affected by variations in shearing stress from the specimen center to the outer fibers. Present tests employ hollow cylindrical specimens, which are described and illustrated. Specimen OD 75 mm, wall thickness 20 mm, height 50-80 mm. The specimens were cut out of FP sheets, and steel end disks of the same diam were glued onto the specimen with epoxy adhesives having a higher shear strength than the specimen. Measurements were made up to the point of the sharp increase of plastic deformation. PS-1 and PKhV-1 failed as brittle materials along a helical surface. PS-4 specimens formed a neck in their central zone. The torque-vs.-angle-of-twist curve does not exhibit any straight-line segment. Supplementary tests showed that a residual deformation in shear obtains from the very beginning of loading. It was concluded that a suitable shear-strength characteristic for FP could be the stress that corresponds to the point of breaking of the diagram of the twist-angle differences, a characteristic analogous to that proposed by Prof. Yu. M. Ivanov as a strength criterion for wood, which Ivanov terms the "plastic-flow limit" and which

Card 2/4

Mechanical properties of fiberglass-reinforced ...

S/804/62/000/011/001/005

to failure. Information concerning group III is shown, as are also the results of long-term flexural tests for both the second and third groups. Stress-rupture data are plotted for tests lasting over 7,000 hours in flexure, and the creep curves are shown for a number of stresses. It is concluded that standard-strength data for the various types of stressed state, which do not at present exist in the TS, e.g., in flexure and compression of KAST-V and KAST, should be represented in the future by means of transfer coefficients, i. e., ratios of the strength values for various types of stress. The investigation of the variability of the tensile strength of the FRP KAST-V and KAST had shown that the requirements of the TS lie below the mean values of the strengths on the average by 1.8-1.9 of the limiting strength. These figures should be used as a starting point for the establishment of standard stresses for other FRP for which there are no TS at present. Coefficients of uniformity for KAST and KAST-V, as obtained in industrial tests, lie in the area of 0.71-0.95. A tentative value of 0.5 has been established to allow for the unavoidable scatter of the test data. The flexural stress-rupture coefficients for KAST-V has been assumed to be 0.55, that for glass-reinforced textolite equal to 0.55. In the long-duration tests it was found that the incrementation of the flexure in non-failing specimens came to a halt approximately after 1,200 hours. The stress-rupture coefficient for the second group was tentatively assumed to be 0.3. This somewhat lower coefficient is attributed to the inadequate stiffness of the binding substance.

Card 3/4

Mechanical properties of fiberglass-reinforced ...

S/804/62/000/011/001/005

to failure. Information concerning group III is shown, as are also the results of long-term flexural tests for both the second and third groups. Stress-rupture data are plotted for tests lasting over 7,000 hours in flexure, and the creep curves are shown for a number of stresses. It is concluded that standard-strength data for the various types of stressed state, which do not at present exist in the TS, e.g., in flexure and compression of KAST-V and KAST, should be represented in the future by means of transfer coefficients, i. e., ratios of the strength values for various types of stress. The investigation of the variability of the tensile strength of the FRP KAST-V and KAST had shown that the requirements of the TS lie below the mean values of the strengths on the average by 1.8-1.9 of the limiting strength. These figures should be used as a starting point for the establishment of standard stresses for other FRP for which there are no TS at present. Coefficients of uniformity for KAST and KAST-V, as obtained in industrial tests, lie in the area of 0.71-0.95. A tentative value of 0.5 has been established to allow for the unavoidable scatter of the test data. The flexural stress-rupture coefficients for KAST-V has been assumed to be 0.55, that for glass-reinforced textolite equal to 0.55. In the long-duration tests it was found that the incrementation of the flexure in non-failing specimens came to a halt approximately after 1,200 hours. The stress-rupture coefficient for the second group was tentatively assumed to be 0.3. This somewhat lower coefficient is attributed to the inadequate stiffness of the binding substance,

Card 3/4

Mechanical properties of fiberglass-reinforced ... S/804/62/000/011/001/005

to failure. Information concerning group III is shown, as are also the results of long-term flexural tests for both the second and third groups. Stress-rupture data are plotted for tests lasting over 7,000 hours in flexure, and the creep curves are shown for a number of stresses. It is concluded that standard-strength data for the various types of stressed state, which do not at present exist in the TS, e. g., in flexure and compression of KAST-V and KAST, should be represented in the future by means of transfer coefficients, i. e., ratios of the strength values for various types of stress. The investigation of the variability of the tensile strength of the FRP KAST-V and KAST had shown that the requirements of the TS lie below the mean values of the strengths on the average by 1.8-1.9 of the limiting strength. These figures should be used as a starting point for the establishment of standard stresses for other FRP for which there are no TS at present. Coefficients of uniformity for KAST and KAST-V, as obtained in industrial tests, lie in the area of 0.71-0.95. A tentative value of 0.5 has been established to allow for the unavoidable scatter of the test data. The flexural stress-rupture coefficients for KAST-V has been assumed to be 0.55, that for glass-reinforced textolite equal to 0.55. In the long-duration tests it was found that the incrementation of the flexure in non-failing specimens came to a halt approximately after 1,200 hours. The stress-rupture coefficient for the second group was tentatively assumed to be 0.3. This somewhat lower coefficient is attributed to the inadequate stiffness of the binding substance.

Card 3/4

Mechanical properties of fiberglass-reinforced ... S/804/62/000/011/001/005

apparently due to its incomplete polymerization. With further improvement of the process technology, it may be assumed that the stress-rupture coefficient of domestic FRP might, within a reasonable time, be increased to a value equivalent to that of foreign FRP of the same type. There are 12 figures, 6 tables, and 17 references (4 Russian-language Soviet, 5 German, and 8 English-language).

ASSOCIATION: None given.

Card 4/4

L 17470-63

EPR/EWP(j)/EFP(c)/EWT(m)/BDS

AEDC/AFTTC/ASD Pa-4/

Pc-4/Pr-4 HM/WW

ACCESSION NR: AP3004776

S/0191/63/000/008/0053/0055

AUTHORS: Panferov, K. V.; Kolpakov, S. V.

TITLE: Methods of mechanical testing of foam plastics 16 72

SOURCE: Plasticheskiye massy*, no. 8, 1963, 53-55.

TOPIC TAGS: foam plastics

ABSTRACT: The need for Government standards for mechanical testing of foam plastics is expressed. The use of Specification No. 410-52 as a basis for compression, stretch and impact strength tests is suggested. Strength test should be in manner worked out by TSNIISK; flex tests according to DIN specifications. Orig. art. has: 2 figures.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 28Aug63

ENCL: 00

SUB CODE: MA, CE

NO REF SCR: 006

OTHER: 006

Card 1/1

KOLPAKOV, S.V., inzh.; TAKUNOVA, S.T., inzh.; TARAKANOV, O.G., inzh.

Properties of rigid foamed polyurethanes. Stroim. mat. 9 no.5:
39-40 My '63. (MIRA 16:7)

(Urethanes--Testing)

YEREMENKO, V.V., kand. tekhn. nauk; KOLPAKOV, S.V., kand. tekhn. nauk

Method of controlling the consistency of the protective mixtures
for reinforcement. Stroi. mat. 10 no.9:21-22 S '64

(MIRA 18:2)

KOLPAKOV, V.; master sports

Indoor flying models. Kryl.rod. 12 no.11:28-29 N '61.

(MIRA 14:11)

(Airplanes--Models)

KOLPAKOV, V.A., MATVEYEV, S.F.

Automatic measurement of the flow of weak nitric acid
and conversion to composition by weight. Khim.prom. 2:148-151
My '60. (MIRA 13:7)
(Nitric acid) (Automatic control) (Flow meters)

41810

S/241/62/000/011/003/005
B144/B186

27.1220

AUTHOR: Kolpakov, V. A.TITLE: Evaluation of the fluorescence-microscope picture of blood
and bone marrow after x-ray irradiation

PERIODICAL: Meditsinskaya radiologiya, no. 11, 1962, 50 - 53

TEXT: The effect of whole-body irradiations of 200, 500, and 700 r on the fluorescence picture of blood and bone marrow was studied in white rats to clear up the inconsistencies in published data. The blood was mixed in a blood count pipette with a fluorochrom solution of acridine orange (1:500 and 1:10000) in a ratio of 1:10. Examinations were made in the blue-violet range with a MEF-1 (MBR-1) microscope using a dark-field condenser, a fluorescence-absorbing complementary K-17 (ZhS-17) filter and a special illuminator with a 30 v, 400 w lamp, so that strong oculars could be used. Total magnification 600 to 800 times. The pH of the buffer solution was varied from 4 to 8; optimum results were obtained with a pH of 7 or 8. Color changes indicative of cell destruction were observed not only after irradiation but also when the stained blood was kept for some time in the

Card 1/2

Evaluation of the fluorescence-microscope...

S/241/62/000/011/003/005
B144/B186

pipette or covered with a cover slip. Hence the degree of irradiation damage cannot be deduced from this phenomenon alone, but can only be evaluated by also making a careful examination of the fine structure of the blood and bone marrow cells. Since the fluorescence method is extremely sensitive to even minute variations in the examination set-up, standardization is urgently required.

ASSOCIATION: Kafedra rentgenologii i radiologii Yaroslavskogo meditsinskogo instituta (Department of Roentgenology and Radiology of the Yaroslavl' Medical Institute) (Professor M. M. Popov, Chairman)

SUBMITTED: May 27, 1962

Card 2/2

KOLPAKOV, V.A.

Fluorescence of erythrocytes of the peripheral blood under conditions of vital fluorochroming with Acridine Orange. Probl. genat. i perel. krovi. 10 no.4:39-42 Ap '65.

(MIRA 18 6)

1. Tsentral'naya nauchno-issledovatel'skaya laboratoriya (sav. Ye.D.Gol'dberg) Tomskogo meditsinskogo instituta.

MATVEYEV, S.F.; KOLPAKOV, V.A.; REBITSKIY, A.F.

Developing a method of automatic control of nitro-oleum
composition. Khim. prom. no.8:596-600 Ag '63. (MIRA 16:12)

KOLPAKOV, V.A.

Using the TS-17 automatic machine for welding small-diameter girth joints. Svar. proizvod. no.8:32-33 Ag 164.

(MIRA 17:9)

1. Balashovskiy mashinostroitel'nyy zavod.

KOLPAKOV, V.A. (Moskva)

Simple device for optical printing of diapositives. Lab. delo.
no.1:57-58 '65. (MIRA 18:1)

КОЛПАКОВ, В. Б.

Условия образования и распространения
копалак. Труды Инст. Неф. Акад. Наук Казах.
ССР. Т. 114-25 (1957). - Тектоника, география
и распространение копалака в западной и
северо-восточной части Чапманского
и географические карты, и гранулометрический состав
копалака. А. П. Копалков

KOLP A.K.E.U. V.B.

11(4) PHASE I BOOK EXPLOITATION 507/2868

Abdusalya namk Kaskhskoy SSR. Institut nefi: Trudy, t. 3 (Transactions of the Petroleum Institute, Kazakh SSR. Academy of Sciences, No. 3) Alma-Ata, IZVO M Kaskhskoy SSR, 1979. 163 p. 700 copies printed.

Eds.: M.P. Karolovskiy and M.Ya. Brallovskaya; Tech. Ed.: Z.P. Romashina; Editorial Board: M.A. Arapovyan (resp. Ed.), V.G. Bon'novskiy, T.A. Babmagallyyev, and M.A. Zavorobkina.

PURPOSE: This book is intended for scientists, engineers, and technicians in the petroleum industry.

COVERAGE: This volume contains 15 studies on the petroleum geology of Western Kazakhstan. The following studies are of special interest: 1) exploration for water in the southern part of the region to offset an inadequate water supply; the possibility of injecting water into oil-bearing formations; the possibility of heating the components of an oil-bearing formation; the effect of high frequency currents; the dielectric permeability and the tangent of the angle of dielectric loss for sands of different porosity at various degrees of moisture and oil saturation; the mineral charges for hydraulic fracturing of formations at the Ekba oilfields, the adsorption of sodium humates on clay and the effect of electrolytes on the quality of clay suspensions. No personalities are mentioned. References accompany individual articles.

Alashin, V.M. Modes of Occurrence of Paleogene Deposits at the Southern Ekba Oilfield of Northwestern and Western Kazakhstan. 53

Kolpakov, V.B., and D.I. Dzhagir'yants. Certain Hydrogeological Regularities in the Southern Ekba Artesian Basin. 61

Kolpakov, V.B. Incident Delta of the Ekba River and the Genesis of the Ekba Artesian Basin. 74

Kolpakov, V.B. Some Problems of Exploration for Water in the Southern Part of the Ekba Basin. 82

Arapovyan, M.A. Thermal Flooding of Oil Horizons and Methods of Doing It. 87

Arapovyan, M.A., V.S. Veliknov, and Ya.Ye. Mozukhina. Studies of High-Frequency Heating of Oil-bearing Formations. 113

Arapovyan, M.A., and M.I. Slonin. Some Results of Studying the ϵ and $\tan \delta$ for Sands of Different Porosity at Various Degrees of Moisture and Oil Saturation. 125

Mashcheryakov, S.Y. Mineral Charges for Hydraulic Fracturing of Formations at the Ekba Oilfields. 133

Zavorobkina, M.A., and V.G. Bon'novskiy. Adsorption of Sodium Humates in Clays. 143

Kaplanov, L.L., and S.S. Subharov. Effect of Electrolytes on the Quality of Clay Suspensions. 149

Korobchikov, I.G., and I.I. Shaya. Studies of the Buser Paleosol Deposits of the Aktyubinskaya Priural'ya by the Bitumen Fluorescence Method Using Ultraviolet Rays as an Excitation Source. 156

KOLPAKOV, V.B.

Medicinal mineral waters in the southern part of the Emba region.
Trudy Inst. nefiti AN Kazakh.SSR 4:80-83 '61. (MIRA 16:4)
(Emba region—Mineral waters)

KOLPAKOV, V.B.

Water resources of the mountainous part of the Mangyshlak Peninsula.
Trudy Inst. nefi AN Kazakh.SSR. 4:4-111 '61 (MIRA 16:4)
(Mangyshlak Peninsula—Water, Underground)

VYSOCHANSKAYA, V.P.; DZHANGIR'YANTS, D.A.; KOLPAKOV, V.B.

Hydrochemical indicators of the presence of oil in Upper Albian
sediments of the Emba artesian basin. Trudy Inst. geol. i geofiz.
AN Kazakh. SSR 1:99-103 '63. (MIRA 16:7)

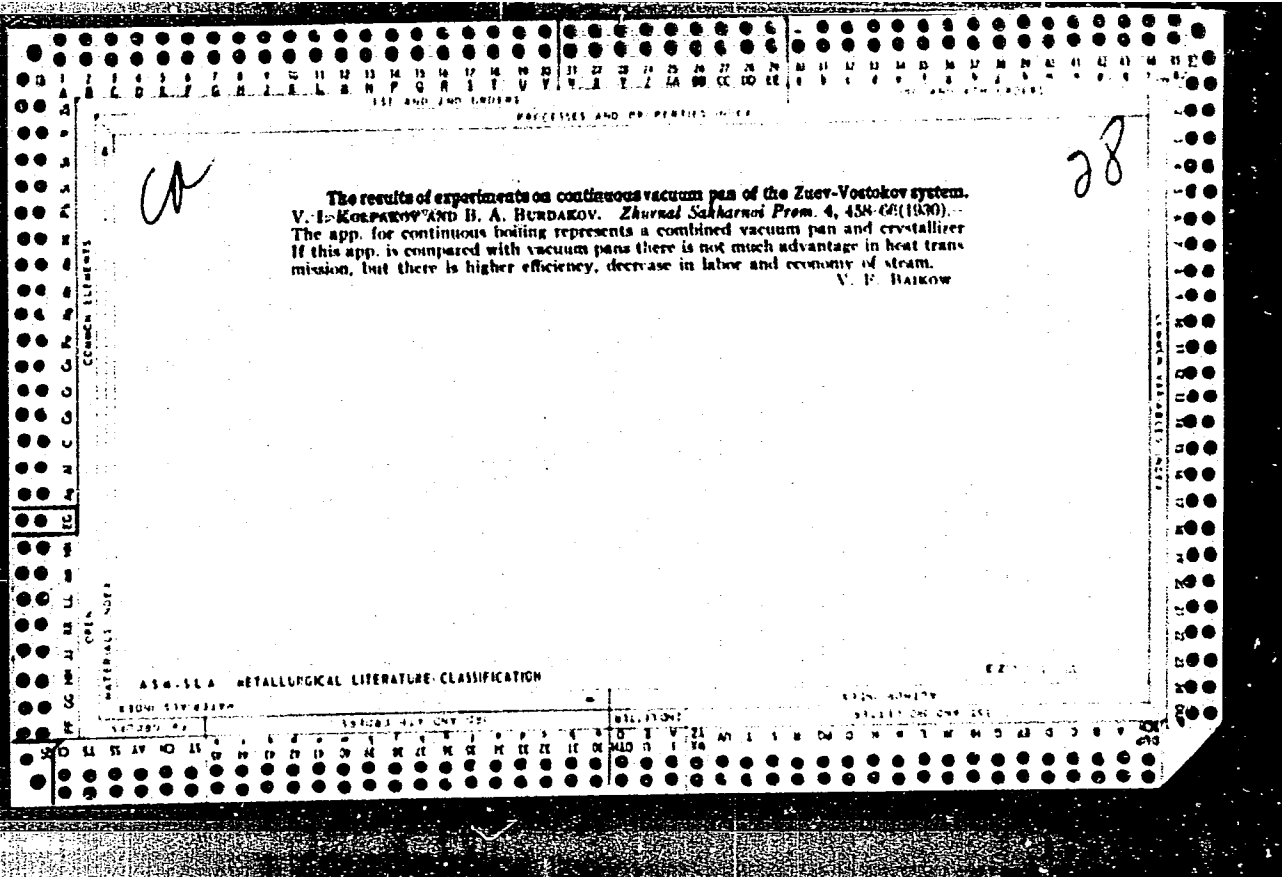
(Emba region--Petroleum geology)

(Geochemical prospecting)

(Emba region--Water, Underground)

KOLPAKOV, V.B.; MESHCHERYAKOV, S.V.

Maltha deposits on the Mangyshlak Peninsula. Trudy Inst. geol. i
geofiz. AN Kazakh. SSR 1:16-25 '63. (MIRA 16:7)
(Mangyshlak Peninsula--Maltha)



1ST AND 2ND ORDERS PROCESSES AND PROPERTIES INDEX 3RD AND 4TH ORDERS

Co

Continuous vacuum apparatus for sugar manufacture. V. I. Kuznetsov and B. A. BURDakov. Russ. 27, (23), Jan. 5, 1931. Mechanical details.

28

COMMON ELEMENTS

COMMON VARIABLES INDEX

OPEN MATERIALS INDEX

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

EXTRACT

7th CROSS

8th CROSS

9th CROSS

10th CROSS

11th CROSS

12th CROSS

13th CROSS

14th CROSS

15th CROSS

16th CROSS

17th CROSS

18th CROSS

19th CROSS

20th CROSS

21st CROSS

22nd CROSS

23rd CROSS

24th CROSS

25th CROSS

26th CROSS

27th CROSS

28th CROSS

29th CROSS

30th CROSS

31st CROSS

32nd CROSS

33rd CROSS

34th CROSS

35th CROSS

36th CROSS

37th CROSS

38th CROSS

39th CROSS

40th CROSS

41st CROSS

42nd CROSS

43rd CROSS

44th CROSS

45th CROSS

46th CROSS

47th CROSS

48th CROSS

49th CROSS

50th CROSS

51st CROSS

52nd CROSS

53rd CROSS

54th CROSS

55th CROSS

56th CROSS

57th CROSS

58th CROSS

59th CROSS

60th CROSS

61st CROSS

62nd CROSS

63rd CROSS

64th CROSS

65th CROSS

66th CROSS

67th CROSS

68th CROSS

69th CROSS

70th CROSS

71st CROSS

72nd CROSS

73rd CROSS

74th CROSS

75th CROSS

76th CROSS

77th CROSS

78th CROSS

79th CROSS

80th CROSS

81st CROSS

82nd CROSS

83rd CROSS

84th CROSS

85th CROSS

86th CROSS

87th CROSS

88th CROSS

89th CROSS

90th CROSS

91st CROSS

92nd CROSS

93rd CROSS

94th CROSS

95th CROSS

96th CROSS

97th CROSS

98th CROSS

99th CROSS

100th CROSS

KOLPAKOV, V. I.

Semienclosed steam power-plants. Moskva, Pishhepromizdat, 1941. 71 p. (51-45332)

TJ395.G5

1. Steam power-plants. I. Kolpakov, V. I., jt. au.

KOLPAKOV, V.P.

Changing the arrangement for the inclusion of a gas offtake
outlet, Gaz. prom. 7 no.3:52-53 '62. (MIRA 17:8)

KOLPAKOV, V.S.

AUTHOR: Kolpakov, V.S. (Rostov, Yaroslav Oblast') 47-4-6/20

TITLE: For the Study of the Equally Retarded Motion (K izucheniyu ravnosamedlennogo dvizheniya)

PERIODICAL: Fizika v shkole, 1957, No 4, page 48 (USSR)

ABSTRACT: On the subject of equally retarded motion some Soviet textbooks recommend the use of equations which are mathematically wrong and cause certain difficulties to the students in solving problems. The author quotes in this connection the "Collection of Questions and Problems" edited by P.A. Znamenskiy. In support of the formulas suggested by the author, he states that if a body is thrown upwards, it is convenient to regard the way and the speed, which are also counted off upwards, as positive as the acceleration is directed toward the opposite side, it would be natural to regard it as a negative quantity. There are two references and 10 formulas.

ASSOCIATION: First Secondary School. Rostov, Yaroslav Oblast' (1-ya srednyaya shkola, gorod Rostov, Yaroslavskoy oblast')

AVAILABLE: Library of Congress

Card 1/1

KOLPAKOV, V. V.

USSR/Geology - Volcanoes

Feb 51

"Mysterious Crater in Patomsk Highland," V. V. Kolpakov

"Priroda" No 2, pp 58-61

Kolpakov discovered crater in north west part of Patomsk high land in Bodaibinsk region of Irkutsk Oblast in the Olekma River basin. He assumes it to be volcanic cone aged only 100 to 200 years. Details are unknown. Location is shown on map.

213T73

KOLPAKOV, V.V., kand. sel'skokhozyaystvennykh nauk, dots.

Effect of irrigation on the balance of water and minerals in the
nutrition of sugar beets [with summary in English]. Izv. TSKhA
no.6:93-124 '57. (MIRA 11:3)
(Irrigation farming) (Sugar beets)

USSR/Cultivated Plants - Technical, Oleaginous, Sachariferous. ii-7

Abs Jour : Ref Zhur - Biol., No 9, 1953, 39/48

Author : Kolpakov, V.V.

Inst : Moscow Agricultural Institute imeni K.A. Timiryazev.

Title : The Influence of Irrigation on the Consumption of Water and Food by the Sugar-Beet.

Orig Pub : Dokl. Mosk. s.-kh. akad. im. K.A. Timiryazeva, 1957, vyp. 29, 74-80.

Abstract : Combined results of studies of water uptake and mineral nutrition in sugar beets showed that a rational combination of mineral food and provision of water makes it possible to increase the efficiency of using irrigating water by 25-50%. The irrigation lowers the expenditure of water and of food substances by 2-3 times per harvest unit. The principal bulk of the water is consumed by sugar beets

Card 1/2

- 128 -

USSR/Cultivated Plants - Technical, Oleaginous, Sacchariferous.

11-7

Abs Jour : *Russk. Zhurn. - Biol.*, No 9, 1958, 39448

both in European and in Asiatic parts of USSR during the months of July and August. Sugar beet receives more N and K than P. The greater part of necessary N, P and K is consumed by the sugar beet in June and July and a lesser part in August. Increased irrigation brings about an important decrease in the harmful nitrogen content in the beet. The content of water in soil must be not less than 70%. -- A.M. Smirnov.

Card 2/2

USSR / Soil Science. Cultivation. Improvement. Erosion.

J-4

Abs Jour : Ref Zhur - Biologiya, No 16, 1958, No. 72741

Author : Kolpakov, V. V.

Inst : Moscow Agricultural Academy Imeni K. A. Timiryazov

Title : Influence of Watering Norms on the Water-Saline Cycle of the Soils of Prisivash', South of the Ukraine

Orig Pub : Dokl. Moskovsk. s.-kh. akad. im. K. A. Timiryazova, 1957, vyp. 29, 357-364

Abstract : On the territory described, dark-chestnut and chestnut solonetz and solonchak soils are widely spread, formed by shallow ground waters at 5-8-10 m of sodium chloride. The use of autumn irrigation with norms of 1500-3000 m³/ha ensured the washing out of water-soluble salts from the soils and the increase of the fertility of the soils. The content of Cl in the 0-80 cm layer decreased by 90%, and in the 0-200 cm layer up to 7-86%. Marked washing out

Card 1/2

KOLPAKOV, V.V., kand. sel'skokhozyaystvennykh nauk.

Moisture accumulation and utilization in upper and deep layers of soil in arid regions of the European S.S.R. [with summary in English]. Izv. TSKhA no.2:145-174 '58. (MIRA 11:6)
(Soil moisture)

KOLPAKOV, V.V., dots. kand. sel'skokhozyaystvennykh nauk.

Droughts in forest-steppe and steppe regions of the European U.S.S.R.
[with summary in English]. Izv. TSKhA no.6:131-154 '58.

(MIRA 12:1)

(Droughts) (Steppes)

KOLPAKOV, V. V., Doc Agr Sci--(diss) " Agromeliorative analysis
and calculation of ^{the} water consumption ^{of} in ~~the~~ agricultural crops
in the ~~drought~~ ^{and} regions of the European part of the USSR." Mos,
1959. 56 pp (Mos Order of Lenin Agr Academy im K.A. Timiryazev).
110 copies. List of author's works at end of text (10 titles)
(KL,38-59, 118)

59

KOLPAKOV, V.V., dotsent, kand.sel'skokhozyaystvennykh nauk

Effect of saturation and ordinary irrigation on the water cycle
and evaporation capacity of soils of the Sivash area. Izv.TSKhA
no.6:107-128 '59. (MIRA 13:6)
(Sivash region--Soil moisture)

KOLPAKOV, V.V., doktor sel'skokhozyaystvennykh nauk

Effect of saturation and flushing irrigation on the salt balance
and the leaching coefficient of soils in the Sivash region. Izv.
TSKbA no.6:113-128 '60. (MIRA 13:12)
(Sivash region--Minerals in soil) (Irrigation)

KOLPAKOV, V.V., doktor sel'skokhoz.nauk

How the rise in ground water level affects evaporation and the content of water-soluble salts in Sivash region soils. Izv. TSKhA no.1:132-147 '61.

(MIRA 14:3)

(Shivash region--Minerals in soil)

(Shivash region--Water, Underground)

KOLPAKOV, V.V., doktor sel'skokhozyaystvennykh nauk

Irrigation and the development of sugar beet growing in irrigated
areas of the southern and southeastern U.S.S.R. Izv. TSKhA
no.4:175-188 '61. (MIRA 14:9)
(Sugar beets--Irrigation)

KOLPAKOV, V.V.

Diffraction of electromagnetic surface waves on the impedance step
of a circular cylinder. Radiotekh. i elektron, 6 no.10:1658-1664
0 '61. (MIRA 14:9)

(Electromagnetic waves--Diffraction)

24.2300

39888
S/044/62/000/007/042/100
C111/C222

AUTHOR: Kolpakov, V.V.
TITLE: The reflection of a plane electromagnetic wave on a semi-bounded periodic structure of conducting plates

PERIODICAL: Referativnyy zhurnal, Matematika, no. 7, 1962, 68, abstract 7B331. ("Tr. Sibirsk. fiz.-tekhn. in-ta pri Tomskom un-te", 1960, no. 39, 25-33)

TEXT: The author solves the problem of the reflection of a plane monochromatic wave on a semi-bounded periodic structure which consists of thin plates with finite conductivity. The mathematical problem consists in the determination of a function $E(x,z)$ which in the free half space and between the plates satisfies the wave equation

$$\frac{\partial^2 E}{\partial x^2} + \frac{\partial^2 E}{\partial z^2} + k_0^2 E = 0 \quad (1)$$

and on the plates satisfies the approximative boundary conditions for

Card 1/3

The reflection of a plane ...

S/044/62/000/007/042/100
G111/G222

thin plates :

$$E(mb - 0, z) = E(mb + 0, z) = \frac{i}{Y\omega\mu_0} \left[\frac{\partial E(mb + 0, z)}{\partial x} - \frac{\partial E(mb - 0, z)}{\partial x} \right]; \quad (2)$$

here b is the period of the structure, m the number of the plate, Y a constant characterizing the conductivity of the plates. With the aid of the Green formula one obtains for the solution the integral formula

$$E(x, z) = e^{ik_0(x \sin \theta_0 + z \cos \theta_0)} - \frac{k_0 Y z_0}{4} \int_0^\infty \sum_{m=-\infty}^\infty E(0, z') e^{imk_0 b \sin \theta_0 x} \times H_0^{(1)} [k \sqrt{(x - mb)^2 + (z - z')^2}] dz'. \quad (3)$$

For $x = 0, 0 \leq z < \infty$ this formula is transformed into the inhomogeneous integral equation of Wiener-Hopf, the kernel of which depends on the

Card 2/3

The reflection of a plane ...

S/044/62/000/007/042/100
C111/C222

difference of the arguments. The author solves this equation according to the method of Fok and determines the electric field on the zero plate $E(0, z)$. Then with the aid of formula (3) the wave field in the half space $z < 0$ and in the structure between the plates is calculated. See also RZhMat, 1959, 5899.

[Abstracter's note : Complete translation.]

f

Card 3/3

KOIPAKOV, V.V., prof., doktor sel'skokhoz. nauk

Combining irrigation with the use of fertilizers as a decisive factor in the increase of crop yield in arid regions of the European part of the U.S.S.R. Izv. TSKNA no.5:83-105 '64.

(MIRA 18:5)

1. Kafedra melioratsii Moskovskoy ordena Lenina sel'skokhozyaystvennoy akademii imeni Timiryazeva.

8(0)

SOV/112-59-2-2326

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 2, p 6 (USSR)

AUTHOR: Kolpakov, V. V.

TITLE: Propagation of Electromagnetic Waves Over a Periodic Structure of Conducting Plates (Rasprostraneniye elektromagnitnykh voln v periodicheskoy strukture iz provodyashchikh plastin)

PERIODICAL: Dokl. 7-y Nauchn. konferentsii, posvyashch. 40-letiyu Velikoy Oktyabr'skoy sots. revolutsii. Nr 2. Tomsk, Tomskiy un-t, 1957, p 95.

ABSTRACT: Propagation of an electromagnetic wave over an infinite periodic structure is considered; the structure consists of rectangular cells which are formed by intersections of two mutually perpendicular sets of plane-parallel equidistant thin conducting plates. Such a structure can represent a dielectric having losses; the dielectric properties can be varied by changing the structure parameters. The problem is solved by means of approximate boundary conditions which are determined in the article. The structure field is

Card 1/2