

Begin  
#413

PAVLOVA, St.

500. Chromatographic determination of hydrocarbons in rose oil. D. Ivanoff, N. Mareeff, St. Pavlova and L. Ivanova (Univ. of Sofia, Bulgaria). *Ind. Parfum.* 1958, 11, 103-106. Established methods of assay for Bulgarian rose oil determine total hydrocarbons as 'stearoptene'. This contains all matter that is insoluble in ethanol (75%) and is solid at 0° and includes aromatic bodies. The method described separates only the hydrocarbons. *Procedure*—Prepare a chromatographic column of Al<sub>2</sub>O<sub>3</sub> (~120 g) (2 cm in diam., 75-80 cm). Accurately weigh a sample of the oil (2 g) and dissolve it in light petroleum (boiling range 30° to 60°). Transfer the soln. to the column and collect one fraction of 30 ml and then fractions of 20 ml. Remove the solvent at 60° until the residue is of constant weight. The results show a loss of ~1.5% of total hydrocarbons on mixtures of known composition. H. B. HEATH

PAVLOVA, ST.

Chromatic determination of hydrocarbons in essence of rose. D. Ivanov, N. Marukov, St. Pavlova, and L. Ivanova (Univ. Sofia). *Ind. parfum.* 11, 105-113 (1956). The hydrocarbons in essence of rose can be analytically determined by chromatographic separation from the oxygenated material. The method was tested initially on artificial rose mixtures, over  $Al_2O_3$ , with petrol ether as the diluent. A dil. soln. gave better results than the highest concn. possible. Two g. of rose sample was dissolved in 10 cc. petrol ether and poured onto a column of  $Al_2O_3$ . Following an eluate of 30 cc., a 2nd fraction of 140 cc. contained all the hydrocarbon. The solvent was removed at  $60^\circ$  to const. wt. The loss of hydrocarbon was 0.3% on the sample, and 2 samples corresponded to within 0.5%. The results agreed with those obtained by the stearoptene method. M. P. G.

BELAVSKAYA, A.P.; PAVLOVA, T.A.

Vegetation and soils of the bed of Gorkiy Reservoir. Trudy Inst.  
biol.vodokhran. no.4:34-48 '61. (MIRA 14:10)  
(Gorkiy Reservoir region--Phytogeography)  
(Gorkiy Reservoir region--Soils)

GALLAK, V.M.; BELINSKAYA, N.I.; PAVLOVA, T.A.

Chlorination of methane by chlorine oxide. *Zhur.prikl.khim.* 38  
no.11:2599-2602 N '65.

(MIRA 18:12)

1. Submitted October 14, 1963.

GALLAK, V.M.; BELINSKAYA, N.I.; PAVLOVA, T.A.

Method of preparing chlorine oxide. Zhur.prikl.khim. 38 no.6:1225-  
1229 Ja '65. (MIRA 18:10)

TOMASHKOVA, Yana [Tomaskova, Jana], doktor; PAVLOVA, T. [translator];  
KOL'GUNENKO, I.I., red.; ZAMYSHLYAYEVA, I.M., red. izd-va;  
KHENOKH, F.M., tekhn. red.

[Beauty and health]Krasota i zdorov'ie. Moskva, Izd-vo M-va  
kommun. khoz. RSFSR, 1962. 86 p. (MIRA 15:12)  
(BEAUTY, PERSONAL)

POPOV, V.V.; PAVLOVA, T.A.

Effect of ultrasonic waves on the ability of the skin to transform  
into the cornea. Vest. Muzk. un. Ser. 6: Biol. pochv. 17 no.6:10-19  
M-L '68. (MIRA 17:6)

1. Kafedra embriologii i morfologije universiteta.



34151

S/169/62/000/001/080/083  
D228/D302

3,5120

AUTHOR: Pavlova, T. D.

TITLE: Noctilucent clouds

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 1, 1962, 24, abstract 1G165 (Astron. Tsirkulyar, no. 217, Dec. 30, 1960, 16-17)

TEXT: Using the material of observations for noctilucent clouds, collected by stations of the Gidrometsluzhba (Hydrometeorologic Service) in the period from June 1957 to October 1959, the author compares the number of appearances of noctilucent clouds in the morning and evening hours. Since during the light summer nights a certain group of clouds may appear before midnight and then disappear in the hours after midnight, it was found to be convenient to compare the total duration of the visibility of noctilucent clouds for a particular interval of time and not the number of their appearances. 338 appearances with a total duration of 373 hrs 30 min were used. The coefficient, equalling the ratio of the summary

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PAVLOVA, T.D., aspirant

Vectorcardiographic changes in women in early stages of pregnancy.  
Trudy Khar. med. inst. no.50:120-130 '62.

(MIRA 19:1)

1. Kafedra akusherstva i ginekologii (zav. - prof. V.F. Matveyeva)  
i kafedra terapii (zav. - prof. I.T. Malaya) Khar'kovskogo medi-  
tsinskogo instituta.

PAVLOVA, T.D.

Visible frequency of the occurrence of noctilucent clouds  
according to observations at stations of the Hydrometeorological  
Service in 1957 and 1958. Issl. ser. obl. no.1:3-58 '60.  
(Clouds) (MIRA 14:8)

L 12768-63

EWI(1)/BDS ASD/AFFTC/ESD-3 RB

55  
S/169/63/000/004/003/017

AUTHOR: Paylova, T. D.

TITLE: A study of the longitudinal distribution of luminous clouds

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 4, 1963, abstract 4A182  
(Tr. soveshchaniya po serebristym oblakam, 1961, v. 3, Tallin, 1962, 119-125; summary in English)

TEXT: The apparent longitudinal distribution of luminous clouds was determined on the basis of data obtained by stations of the Hydrological and Meteorological Service during the IGY. The total number of occurrences and the number of cases of visibility of luminous clouds were counted for 30° longitudinal intervals chosen so that each zone included two time zones. Longitudes 22°30', 52°30', 82°30', 112°30', 142°30', and 172°30' were selected as boundaries. A marked longitudinal pattern was noted -- the number of luminous clouds decreased from west to east. This trend persisted but was of a smoother nature after corrections were made for irregularity in the distribution of observations, differences in periods of observations, and in the cloud cover during observations.  
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[Abstracter's note: Complete translation.]

S/169/63/000/003/010/042  
D263/D307

AUTHOR: Pavlova, T.D.

TITLE: Preliminary statistical data for the frequency of the appearance of noctilucent clouds in 1959

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 3, 1963, 32, abstract 3A188 (Tr. Soveshaniya po serebristym oblakam, 1961, T. 5. Tallin, 1962, 106-118 (Eng. summary))

TEXT: Processing of the results obtained by 215 stations of the Hydrometeorological Service network over 1957-1959 allowed a compilation of all sightings of noctilucent clouds, including the dates, station numbers (defining their geographical coordinates), times of sighting (mean solar time), brightness of the noctilucent clouds, and assessment of the cloudiness of the lower layers in the glowing segment. Altitude of the sun for which most noctilucent clouds were observed was  $-10^{\circ}$ . To allow chronological study the whole material was resolved into decadic intervals, independently of geographical position and solar altitude. Maximum monthly sightings  
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S/169/63/000/003/010/042  
D263/D507

Preliminary statistical data ...

fell in June, and a very sharp decadic maximum occurred in the first half of July. The greatest number of noctilucent clouds was observed in latitude 55°. Temporal and geographical distribution of noctilucent clouds showed that: 1) no noctilucent clouds are observed in latitude 70°; 2) at 60 and 65° the greatest number of noctilucent clouds were sighted in the 1st and 2nd decade of August; 3) at 50 and 55° the maximum occurred in the first decade of July; 4) in latitude 45° few clouds were observed and were almost evenly distributed in time.

[Abstracter's note: Complete translation]

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L 19335-63

EWT(1)/BDS/ES(v) AFFTC/ASD/ESD-3/AFGC --Pe-4/Pi-4/Po-4

PT-2/GW

ACCESSION NR: AR3002041

S/0269/63/000/005/0027/0027

SOURCE: RZh. Astronomiya. Otdel'nyy vypusk. Abs. 5.51.265

AUTHOR: Pavlova, T. D.

TITLE: A study of the longitudinal distribution of noctilucent clouds<sup>12</sup>

CITED SOURCE: Trudy Soyeshchaniya po serebristym oblakam, 1961, Tallin, Vol. 3, 1962, 119-125

TOPIC TAGS: noctilucent cloud

TRANSLATION: In his study of the longitudinal distribution of noctilucent clouds the author made use of data collected during the International Geophysical Year by Gidrometsluzhba (Hydrometeorological Service). He computed the total number of appearances of the clouds for longitude intervals of  $30^{\circ}$ , so chosen that each zone included two time zones. The boundaries chosen were  $22^{\circ}30'$ ,  $52^{\circ}30'$ ,  $82^{\circ}30'$ ,  $112^{\circ}30'$ ,  $142^{\circ}30'$ ,  $172^{\circ}30'$ . A marked longitude relationship was observed -- the phenomena dropped off from west to east. Following the introduction of corrections for nonuniform distribution of observing stations, and taking into account cloudiness, the suggested relationship remains, but is of less prominent character.

H. Rudometkina.

DATE ACQ: 30 May 63  
Card 1/1

SUB CODE: AI

ENCL: 00

PAVLOVA, T.D.

Vectorcardiographic changes in healthy women during the course  
of pregnancy and puerperium. Akush. i gin. 38 no.5:28-34 S-0  
'62. (MIRA 17:11)

1. Iz kafedry akushe:stva i ginekologii (zav. - prof. V.F. Matveyeva)  
i kafedry terapii (zav. - prof. L.T. Malaya) pediatricheskogo fakul'-  
teta Khar'kovskogo meditsinskogo instituta.



S/169/62/00G/003/089/098  
D228/D301

3,520

AUTHOR:

Pavlova, T. D.

TITLE:

Apparent distribution of noctilucent clouds according to observational data for 1957-1958

PERIODICAL:

Referativnyy zhurnal, Geofizika, no. 3, 1962, 19, abstract 3G136 (Tr. VI Soveshchaniya po serebristym oblakam, 1959, Riga, AN LatvSSR, 1961, 93-105)

TEXT: Some results of the statistical processing of noctilucent-cloud observations, carried out in 1957 and 1958, are given. The following two accounting units were applied in the work: 1) The night during which noctilucent clouds were seen at a given station; such a unit is called an "appearance", and their sum is designated by n. 2) The observational period during which noctilucent clouds were noticed at a given station; this unit is termed an "instance of visibility", and the number of units for a certain interval is designated by N. Given a total number of nights  $n_B$  (in a certain

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Apparent distribution of ...

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interval of time), during which noctilucent clouds would have been observed had they existed, and the corresponding number of periods of possible visibility  $N_B$ , it is possible to obtain the frequency of noctilucent-cloud appearances  $h$ . Then, the frequency of cloud appearances and instances of their visibility can be expressed by the following congruences:

$$h_n = \frac{n}{n_B} \quad \text{and} \quad h_N = \frac{N}{N_B}$$

All the periods and nights that were used may be divided into three groups. These pertain to the first period and night, when noctilucent clouds were recorded by observers; to the second, when they could have been seen, but were not detected; and to the third, when noctilucent clouds could not be seen according to the visibility conditions. If the corresponding numbers for a certain segment

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of time are denoted by  $n_1, n_2, n_3$  and  $N_1, N_2, N_3$ , then the frequencies of noctilucent-cloud appearances may be expressed by the congruences:

$$h_n = \frac{n_1}{n_1+n_2} \quad \text{and} \quad h_N = \frac{N_1}{N_1+N_2}$$

If  $P_o$  is the probability of detecting the corresponding noctilucent clouds in relation to underlying layers' state of cloudiness, and  $P_D$  is the analogous quantity in relation to the sun's sinking below the horizon, then the expression

$$h_N = \frac{N_1}{\sum P_o P_D}$$

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Apparent distribution of ...

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holds for the frequency  $h$  in the second approximation. A cloud catalog was prepared from the data of noctilucent-cloud observations in the IGY period. It contains the following information: the date of the observations; the number of the station, which defines its name and coordinates; the moment of the observational period according to local solar time; the depth of the sun's submergence; the visual brightness of noctilucent clouds; and the cloudiness in the sector of glow. The magnitudes of  $P_0$  and  $P_D$  were determined empirically. The material of all stations was, regardless of the geographic latitude, divided into 10-day intervals in order to expose the apparent annual variation of noctilucent-cloud appearances, and the totals for the number of appearances and the instances of visibility were calculated. The obtained results showed that frequent noctilucent-cloud appearances fall approximately into the period from the second 10-days of June to the first 10-days of August. To study the latitudinal distribution of noctilucent-cloud appearances all the data were, regardless of their dates, divided into  $5^\circ$  latitudinal zones in such a way that the middles of the intervals fell on

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latitudes 45, 50, 55, 60, 65, and 70°. It was found that the maximum of noctilucent-cloud appearances fell on latitude 60° in 1957 and on latitude 55° in 1958. The maximum for the number of instances of visibility fell on the same latitudes. As regards the diurnal variation in the frequency of appearances, this is absolutely unknown, since noctilucent clouds are observed only in a limited part of the day, when the depths of the sun's submergence are approximately the same. [Abstracter's note: Complete translation.]

Card 5/5

PAVLOVA, T.D.; POSTNIKOVA, Ye. K.

Inflammatory complications in patients with cancer of the cervix  
uteri following preoperative irradiation. Med.rad. 9 no.9:30-33  
S '64. (MIRA 18:4)

1. Ginekologicheskoye otdeleniye Khar'kovskogo instituta medi-  
tsinskoy radiologii i kafedra onkologii (zav. - prof. S.I.  
Pavlenko) Ukrainskogo instituta usovershenstvovaniya vrachey.

PAVLOVA, T.D.

Noctilucent clouds. Astron. tsir. no. 217:16-17 D '60. (MIRA 14:3)

1. Astronomicheskaya observatoriya Len'gradskogo gosudarstvennogo universiteta.

(Clouds)

3,5120

29880  
S/169/81/000/009/039/056  
D228/D304

**AUTHOR:** Pavlova, T. D.

**TITLE:** Visible frequency of the appearance of noctilucent clouds according to the observational data of the stations of the hydrometeorologic service for 1957 and 1958

**PERIODICAL:** Referativnyy zhurnal. Geofizika, no. 9, 1961, 16, abstract 9G141 (V sb. Issled. serebristykh oblakov, no. 1, L., Leningrad. un-t, 1960, 3-58)

**TEXT:** During the regular scanning of the sky at the network of observational stations during the part of the day when noctilucent clouds may appear, observers recorded the dates of the appearance of clouds and the interval of time in which these are present in the sky. Having sufficiently extensive material from regular observations, it is possible to divide it according to months, 10-day periods, hours of the day, zones of geographical latitude, intervals of geographic longitude, and other parameters, and thus to study the distribution of noctilucent-cloud appearances in time and space. At the same time, one should bear in mind the

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conditionality of such observational material, which consists of the fact that each station just records the visibility of clouds in its part of the sky wherein these clouds are, as a rule, situated extremely far from the station in question. Owing to this, the spatial distribution of their appearances may strongly differ from the distribution of the projections of the actual clouds onto the ground surface. In addition, the illumination conditions, expressed by the depth of the sun's sinking below the horizon and by the position of a given cloud in the sky at the point of observation, and also the partial or complete closing of the sky in the segment of glow by clouds of the underlying formations, influence the visible distribution of noctilucent clouds. The observations of noctilucent clouds were included in the "meteorology" group of the IGY program and were entrusted to 220 stations of the network of the Glavnoye upravleniye gidrometeorologicheskoy sluzhby (Central Directorate of the Hydrometeorologic Service). In accordance with the accepted plan, the systematic scanning of the crepuscular sky was to be undertaken from March 1 to October 31, the beginning and end of the observations occurring at the moment of the sun's sinking to the angle  $D = 6^{\circ}$  and  $D = 18^{\circ}$  ✓

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respectively. Similarly in the morning the observations were started when  $D$  equalled  $18^{\circ}$  and finished when  $D$  equalled  $6^{\circ}$ . The examination of the sky was completed in 15 minutes; the brightness of the clouds was evaluated from the 5-mark scale. In 1957 - 1958, the number of cloud appearances at different stations comprised 198, the number of cases of visibility (during observations for 15-minute intervals) was 1279, and the average duration of a single appearance was 1 hr. 38 min. The shortest duration of the appearance of noctilucent clouds was 15 min., and the longest was 5 hrs. 30 min. The final result of all the work on this material was a catalog of the incidental visibility of authentically recognized clouds. The catalog contains: (1) The date of observation; (2) the station number; (3) the moment of the time of the observations; (4) the depth of the sun's sinking; (5) the brightness of the clouds; (6) the character of the cloudiness in the segment of glow. The processing of the observations permitted the appraisal of the depth of the sun's sinking below the horizon at which the visibility conditions become optimal. According to the data of 1957, this depth comprises  $10^{\circ}$ , while according to those for 1958, it amounts to  $11^{\circ}$ . The yearly course of the

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Visible frequency of...

appearance of clouds shows that the time of their abundant appearance in 1958 lasted from the second 10-day period of June to the first 10-day period of August inclusively; the maximum number of cloud appearances in 1957 occurred in the first 10-day period of July. The earliest appearance of noctilucent clouds was recorded on March 13 (1958), their latest appearance being noted on October 11 (1957). The latitudinal distribution of noctilucent clouds indicates that their maximum appearances occurred at  $\phi = 60^\circ$  in 1957 and at  $\phi = 55^\circ$  in 1958. The most northerly observation of noctilucent clouds was on September 11, 1957, at latitude  $71^\circ 35'$ , the most southerly observation being on September 25, 1958, at latitude  $45^\circ 25'$ . The comparison of the amount of cloud appearances at dusk with those at dawn shows the clear predominance of the latter over the former. [Abstracter's note: Complete translation.]

Card 4/4

PAVLOVA, T.G. (Moskva); LAZURKINA, V.D. (Moskva)

Method for computing the absorbed doses in intracavitary  
gamma-therapy of cancer of the cervix uteri. Trudy TSentr.  
nauch.-issl. inst. rentg. i rad. 11 no.1:88-97 '64.  
(MIRA 18:11)

PAVLOVA, T.G.

New type of granite formation as revealed in a study of the western part of central Kazakhstan. Dokl. AN SSSR 156 no. 4: 827-829 Je '64. (MIRA 17:6)

1. Geologicheskii institut AN SSSR. Predstavleno akademikom A.L. Yanshinym.

PAVLOVA, T.G.

Relationship between granitoid igneous activity and folding as  
revealed by a study in the southern Ural (central Kazakhstan).  
Trudy GIN no.932, 1977, 267. (MLRA 1986)

**PAYLOVA, T.G.**

Tenter carriage brake. Obm. tekhn. opyt. [MLP] no.9:27-28 '56.  
(MIRA 11:10)

(Textile machinery)

PAVLOVA, Tat'yana georgiyevna; SHTREYS, N.A., otv.red.

[ Relationship between folding and granitoid igneous activity in the southern Ulutau]. Sootnoshenie mezhdru skladkoobrazovaniem i granitoidnym magmatizmom v Iuzhnom Ulutau. Moskva, Izd-vo "Nauka", 1964. 183 p. (Akademii nauk SSSR. Geologicheskii institut, Trudy, no.101).

(MIRA 17:7)



VELTKOVSKIY, A.S.: PAVLOVA, S.M., PROF.

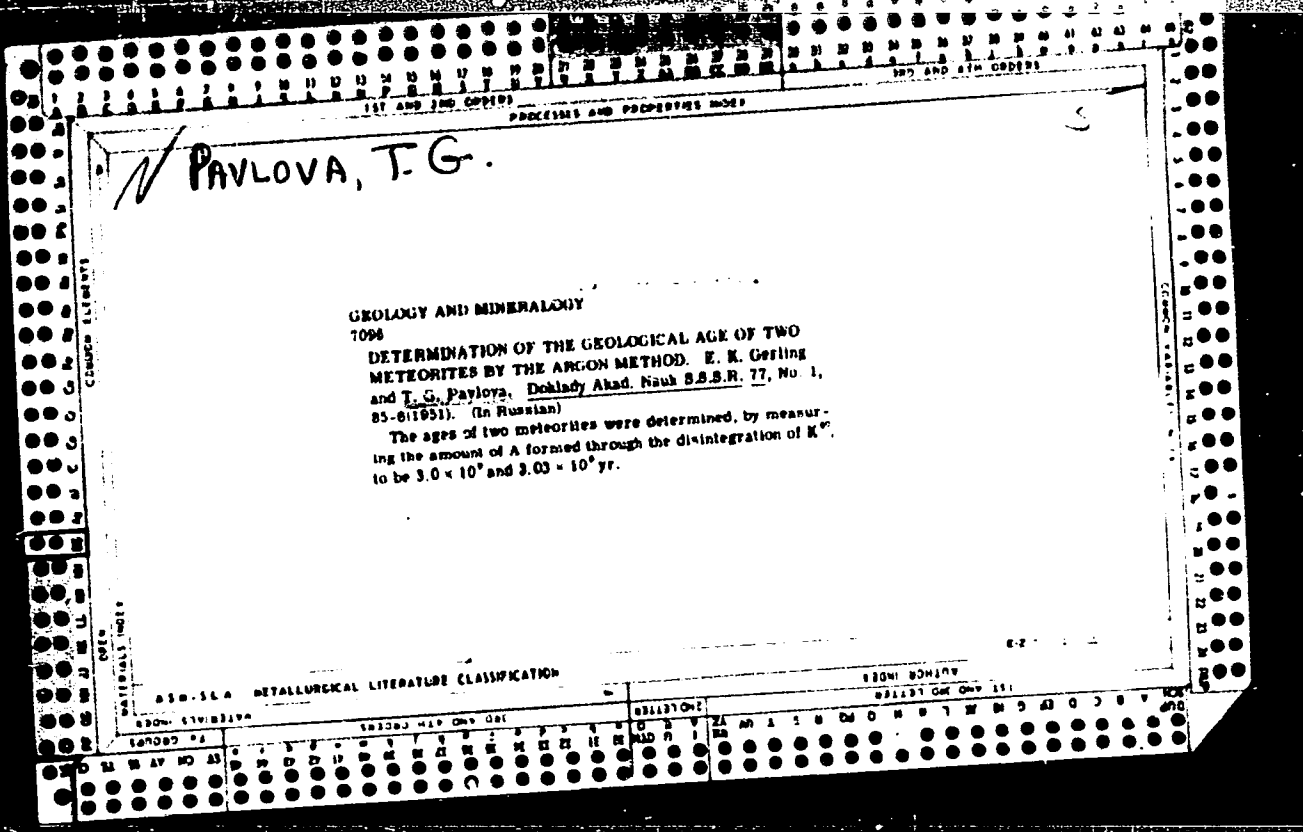
Nefti SSSR (USSR oils) Moscow, 1945 (co-authors)

Abstracted in USAF "TreasureIsland" on file in Library of Congress, Air Information  
Division, Report No. 88536 UNCLASSIFIED

KOZLOVA, A.V.; PROLOVA, A.V.; PAVLOVA, I.G.; SARKISYAN, Yu.Kl.

Dosage calculation in intracavitary irradiation of bladder tumors  
with a solution of radioactive gold ( $Au^{198}$ ). Med. rad. 9 no. 1:4-12  
Ja '64. (MIRA 11:9)

1. Radiologicheskiy otdel (zav. - prof. A.V.Kozlova) i asimetricheskiy  
otdel (zav. - dotsent A.N.Krongauz) Nauchno-issledovatel'skogo rentgen-  
radiologicheskogo instituta Ministerstva zdoravookhraneniya RSFSR



KRONGAUZ, A.N.; PAVLOVA, T.G.; FROLOVA, A.V.

Dosimetric characteristics of gammatrin-2. Med.rad.no.1:  
12-17'63. (MIRA 16:10)

1. Iz Gosudarstvennogo nauchno-issledovatel'skogo rentgeno-  
radiologicheskogo instituta Ministerstva zdravookhraneniya  
RSFSR.

(GAMMA RAYS---EQUIPMENT AND SUPPLIES)  
(RADIATION---DOSAGE)

PAVLOVA, T.G.

Dosimetric characteristics of the GUT-Co-400 apparatus.  
Med.rad. no.1138-24'63. (MIRA 16:10)

1. Iz otdela klinicheskoy dozimetrii (zav. - dotsent A.N. Krongauz) Nauchno-issledovatel'skogo rentgeno-radiologicheskogo instituta (dir. - prof. I.G.Lagunova) Ministerstva zdravookhraneniya RSFSR.

(RADIATION--DOSAGE)  
(GAMMA RAYS--EQUIPMENT AND SUPPLIES)

SOV/11-59-10-7/16

3(5)

AUTHOR: Pavlova, T. G.

TITLE: The Karsakpay Massif of Alkaline and Nepheline Syenites and its Position in the Tectonic Structure

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geologicheskaya, 1959, No. 10, pp 78-91 (USSR)

ABSTRACT: The Karsakpay massif of alkaline and nepheline syenites is situated in the axial part of the ~~Maytyubinskiy~~ anticlinorium in the western part of Central Kazakhstan. It was discovered and described by Ye. L. Butskova and V.S. Sobolev, mapped by K.A. Rachkovskaya and studied by B.S. Dubrova in the petrographic laboratory of the Karagandinskoye geologicheskoye upravleniye (Karaganda Geological Administration). The author, who studied the massif under the supervision of N.A. Shtreys, sums up the findings of the mentioned geologists. The ~~Maytyubinskiy~~ anticlinorium is composed of granite-gneisses and granites of Pre-Cambrian age, of graniorites and diorites. The syenite massif is enclosed in the rocks composed of Lower Proterozoic micro-gneisses and crystalline schists. The wide diversity of these

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The Karsakpay Massif of Alkaline and Nepheline Syenites and its Position in the Tectonic Structure

agglomerations. The author further describes different varieties of these syenites, a result of a very active metasomatism process. The albitization process is widely spread in both groups. In general, gradual albitization processes can be observed in all rocks of the massif. The results of chemical analyses of these rocks are given in (table 1). These analyses were made by Ye.A. Shilova and A.N. Zarubitskaya in the laboratory of the Institute of Geology of the AS USSR and by M.N. Veprintseva - in the laboratory of the Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii AN SSSR (Institute of Geology of Mineral Deposits Petrography, Mineralogy and Geochemistry of the AS USSR) (IGEM AS USSR). The IV and VI results were taken from the Ye.L. Butakova's work. Numerical values, obtained by the A.N. Zavaritskiy method, given in table 2 are taken from the variation diagram (figure 7). Comparing the analyses of granites and syenites in the series: granites - alkaline syenites - nepheline syenites a gradual increase of the "a" parameter and

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**The Karsakpay Massif of Alkaline and Nepheline Syenites and its Position in the Tectonic Structure**

gradual decrease of the "s" parameters are observed. The presence of granosyenites in the massif, a close relation between the leucocrite syenites and the granites as well as a certain albitization of granites suggest a genetic correlation of syenites and granites. The specific development of albitization in alkaline rocks is presumably connected with their structural situation. Granites form a 100 km long belt along the Maytyubino anticlinorium and are associated with the ruptured zone of the anticlinorium. A subsequent reoccurrence of tectonic movements caused new post-intrusive ruptures and the formation of a Middle - Paleozoic syncline. Syenites are situated in the folded zone of the anticlinorium which was formed before the rocks of the Upper-Proterozoic era were formed. The formation of the Karsakpay massif in the anticlinal structure favored the process of an intensive albitization. Later structural ruptures caused the formation of a block which included the folded zone with syenite massif. The occurrence of alkaline and nepheline syenites can be explained by the

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LYAPIDEVSKIY, V.K.; PAVLOVA, T.G.

Visual method for the determination of low activities. Med.rad.  
no.11:66-71 '61. (MIRA 14:11)

1. Iz dozimetricheskoy laboratorii Gosudarstvennogo nauchno-  
issledovatel'skogo rentgeno-radiologicheskogo instituta Mini-  
sterstva zdravookhraneniya RSFSR.  
(RADIATION MEASUREMENT)

PAVLOVA, T.G.

Position of gneissose granites and granites in the structure of the southern Ulutau (central Kazakhstan). Izv. AN SSSR. Ser. geol. 25 no.4:16-25 Ap 1960. (MIRA 13:11)

1. Geologicheskij institut AN SSSR, Moskva.  
(Ulutau Mountains--Granite)

GROMOVA, L.F.; PAVIOVA, T.D.

Observing the visibility of lunar surface features during the  
lunar eclipse of May 13-14, 1957, in Leningrad. Astron. tsir.  
no.189:20-21 P '58. (MIRA 11:8)

1.Astronomicheskaya observatoriya Leningradskogo universiteta.  
(Eclipses, Lunar--1957) (Moon--Surface)

PAVLOVA, T.G.

Method for the determination of the dosage field in a homogeneous phantom emitted from large focus distance gamma-units with Co<sup>60</sup> source. Med. rad. 9 no.3:24-32 Mr '64. (MIRA 17:12)

1. Otdel klinicheskoy dozimetrii (zav. - dotsent A.N.Krongauz) Nauchno-issledovatel'skogo rentgeno-radiologicheskogo instituta Ministerstva zdravookhraneniya RSFSR, Moskva.

POTEKHIN, I.I., glav. red.; BARANOV, A.N., red.; BELYAYEV, Ye.A., red.;  
GELLER, S.Yu., red.; GRAVE, L.I., st. nauchnyy red.; GRIGOR'YEV,  
A.A., red.; GUEER, A.A., red.; KULAGIN, G.D., red.; MALIK, Ya.A.,  
red. MANCHKHA, P.I., red.; MILOVANOV, I.V., red.; NERSESOV, G.A.,  
red.; OL'DEROGGE, D.A., red.; ORLOVA, A.S., red.; POPOV, K.M.,  
red. ROZIN, M.S., kand. ekon. nauk, red.; SMIRNOV, S.R., red.;  
UFIMOV, I.S., red.; SHVEDOV, A.A., red.; YASTREBOVA, I.P., red.;  
PAVLOVA, T.I., tekhn. red.

[Africa; encyclopedia] Afrika; entsiklopedicheskiy spravochnik.  
Glav. red. I.I.Potekhin. Chleny red. kollegii: A.N.Baranov i dr.  
Moskva, Vol.1. A - L. 1963. 474 p. (MIRA 16:4)

1. Sovetskaya entsiklopediya, Gosudarstvennoye nauchnoye izdatel'-  
stvo, Moscow.

(Africa--Dictionaries and encyclopedias)

PAVLOVA, T.M., redaktor

[Western Europe (central and southern); school map for upper grades of the secondary school] Zapadnaya Evropa (tsentr i iug): uchebnaia karta. Dlia starshikh klassov srednei shkoly. Otvetstvennyi redaktor Pavlova, T.M. Moskva, 1949. (MIRA 7:6)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye geodesii i kartografii.  
(Europe--Maps)

PAVLOVA, T.N.

On table-type general geographic maps of foreign countries; in the  
order of discussion. Sbor.st.po kart. no.6:49-51 '54. (VVA 10:9)  
(Maps)

PAVLOVA, T.N.

Diseases

See 14c

Hygiene



PAVLOVA, T.N., studentka IV kursa

Rectilinear correlation and its application in geodesy. Trudy  
MIIGAIK no.45:139-144 '61. (MIRA 14:7)

1. Moskovskiy institut inzhenerov geodezii, aerofotos"yemki i  
kartografii, geodezijskiy fakul'tet.  
(Correlation (Statistics)) (Geodesy)

PAVLOVA, T.P.

Review of "Problems in the development of ambulatory polyclinic attendance for the population in the Czechoslovak S. S. R. up to 1980". Sov. zdrav. 21 no.3:92-93 '62. (MIRA 15:3)  
(CZECHOSLOVAKIA--MEDICAL CARE)

BYKHOVSKIY, M.L., ZINOV'YEV, V.A., PAVLOVA, T.T.

Experimental investigation of dynamic systems with electric drives.  
Trudy Inst.mash.Sem.po teor.mash. 20 no.78:33-42 '60.

(MIRA 13:8)

(Machinery, Kinematics of) (Electric driving)

PAVLOVA, T. T.

PAVLOVA, T. T. **THEORY OF OSCILLATIONS**  
Moscov, 1950. 39 p. Krieva slyp izdat. 2,700 copies

**Abstract:** This book is intended for scientific research workers and engineers concerned with the theory and design of mechanisms.

**Keywords:** The collection contains articles dealing with theoretical problems of mechanisms and machines. Includes also discussions on the application of various methods of mathematical analysis to the solution of dynamic systems, the application of the Boltzmann and Gibbs methods to the solution of problems of dynamics, and an appendix containing the author's references.

**Author:** PAVLOVA, T. T. (Pavlova, Tat'yana Ivanovna). **Title:** *Teoriya kolebaniy*. **Publication:** *Teoriya kolebaniy*. **Place:** Moscow. **Year:** 1950. **Pages:** 39. **Notes:** 2,700 copies.

**Abstract:** This book is intended for scientific research workers and engineers concerned with the theory and design of mechanisms.

**Keywords:** The collection contains articles dealing with theoretical problems of mechanisms and machines. Includes also discussions on the application of various methods of mathematical analysis to the solution of dynamic systems, the application of the Boltzmann and Gibbs methods to the solution of problems of dynamics, and an appendix containing the author's references.

**Author:** PAVLOVA, T. T. (Pavlova, Tat'yana Ivanovna). **Title:** *Teoriya kolebaniy*. **Publication:** *Teoriya kolebaniy*. **Place:** Moscow. **Year:** 1950. **Pages:** 39. **Notes:** 2,700 copies.

Cont 1/4

19/000/241  
25-14-60

27 1/40

27 1/40

41381  
S/247/62/012/005/001/004  
D296/D307

AUTHOR: Pavlova, T.Ya.

TITLE: The restoration of impaired functions in the higher parts of the central nervous system in dogs, after repeated resuscitation under conditions of hypothermia

PERIODICAL: Zhurnal vysshey nervnoy deyatel'nosti imeni I.P. Pavlova, v. 12, no. 5, 1962, 896 - 902

TEXT: Two dogs in hypothermia (24°C) were brought into a state of clinical death by bleeding. One belonged to the strong mobile balanced, and the other to the strong mobile unrestrained type of nervous system. After 30 minutes resuscitation was carried out by the method of V.A. Negovskiy (Ozhivleniye organizma i iskusstvennaya gipotermiya (Resuscitation and Artificial Hypothermia) Moscow, 1960) 10 months later, after complete recovery, the process was repeated with the clinical death lasting 60 minutes. Serious disorders in the conditioned reflex activity and neurological, mainly cerebellar, symptoms were recorded, which subsided after 9 - 12 months, revealing the exceptional capacity of the cerebral cortex for the restoration  
Card 1/2

ZOLOTOKRYLINA, Ye. S.; KOLGANOVA, N. S.; RYABOVA, N. M.; PAVLOVA, T. Ya.

Treatment of hemodynamic disorders in traumatic shock and terminal states. Ortop., travm. i protez. no.12:9-16 '61.

(MIRA 15:2)

1. Iz TSentra po lecheniyu shoka i terminal'nykh sostoyaniy pri bel'nitse im. S. P. Botkina (glavnyy vrach - prof. A. N. Shabanov, nauchnyy konsul'tant - prof. D. K. Yazykov) i laboratorii eksperimental'noy fiziologii po ozhivleniyu organizma (zav. - prof. V. A. Negovskiy) AMN SSSR.

(SHOCK)

VERB, I.M.; PAVLOVA, T.A.; PISAREV, B.P., red.; ZAK, A.L., tekhn.  
red.

[Clothing and linen for therapeutic and prophylactic  
institutions] Odezhda i bel'e dlia lechebno-profilakticheskikh  
uchrezhdenii. Moskva, Medgiz, 1962. 382 p. (MIRA 16:1)  
(HOSPITALS--EQUIPMENT AND SUPPLIES)

PAVLOVA, T.Ya.

Change in the conditioned reflex activity of dogs resuscitated  
after clinical death from blood loss in hypothermia. Zhur.vys.  
nerv. deiat. 11 no.2:312-317 Mr-Apr '61. (MIRA 14:6)

1. Laboratory of Experimental Physiology of Vivifying Organisms,  
and Laboratory of Higher Nervous Activity, Institute of Medidinal  
Diet, U.S.S.R. Academy of Medical Sciences, Moscow.  
(HYPOTHERMIA) (CONDITIONED RESPONSE)  
(HEMORRHAGE) (RESUSCITATION)



SHAGIDULLIN, R.R.; PAVLOVA, T.Ye.

Vibrational spectra of organoarsenic compounds. Report No.2;  
Raman spectra of ethers and acid chlorides of trivalent arsenic.  
Izv. AN SSSR. Ser. khim. no.6:995-998 '65.

(MIRA 18:6)

1. Khimicheskiy institut imeni Arbuzova AN SSSR.

SHAGIDULLIN, R.R.; PAVLOVA, T.Ye.

Vibrational absorption spectra of organoarsenic compounds.  
Part 1: Infrared absorption spectra of some ethers and  
chlorides of trivalent arsenic acids. Izv. AN SSSR. Ser.  
khim. no.12:2117-2124 D '63. (MIRA 17:1)

1. Khimicheskiy institut im. A.Ye. Arbuzova AN SSSR.

BOLOTINA, F.Ye.; GAMBAYAN, Kh.P.; DENISOVA, G.A.; DUBROVINA, L.I.;  
KOZHINA, I.S.; KYURKCHAN, V.N.; MAKAROVA, T.I.; PAVLOVA,  
U.G.; REZVETSOV, O.A.; SMIRNOVA, V.V.; SURZHIN, S.N.,  
kand. tekhn. nauk; TAMAMSHYAN, S.G.; TRUSOVA, S.A.;  
FILOGRIYEVSKAYA, Z.D.; CHINENOVA, E.G.; SHISHKINA, N.N.;  
IL'IN, M.M., zasl. deyatel' nauki RSFSR, doktor biol. nauk  
prof., red.; PRITYKINA, L.A., red.; ZARSHCHIKOVA, L.N.,  
tekhn. red.

[Spice and aromatic plants of the U.S.S.R. and their use  
in the food industry] Priano-aromaticheskie rasteniia SSSR  
i ikh ispol'zovanie v pishchevoi promyshlennosti. Moskva,  
Pishchepromizdat, 1963. 430 p. (MIRA 17:2)

MAKAROVA, T.I.; SURZHIN, S.N.; PAVLOVA, U.G.; SERGEYEVA, T.V.

Use of Russian spices in the fish industry. Trudy Bot.inat.Ser.  
5 no.6:260-278 '60. (MIRA 13:6)  
(Fishery products--Preservation)  
(Spices)

PAVLOV, A.N., otv. za vypusk; VOLODICHEVA, V.N.; IVANOVA, A.I.; KULAKOV, I.L.; LYAMINA, T.N.; MIT'KINA, L.I.; PUCHYAKOVA, N.P.; RODIONOVA, L.I.; ROMANOVA, M.M.; SOFIYEV, E.S.; CHICHKINA, A.A.; TRESORUKOVA, Z.G.; BOGATYREV, P.P.; BROVKINA, A.I.; IVANOVA, L.D.; IVASHKIN, G.A.; KAMNEV, N.I.; LYSANOVA, L.A.; OZHEREL'YEVA, Z.I.; PAVLOVA, T.I.; TYUTYUNOVA, N.I.; UMNITSYNA, A.P.; ZHIVILIN, N.N.; ALESHICHEV, M.P.; VINOGRADOV, V.I.; YEREMIN, P.S.; KRAVCHENKO, Ye.P.; LOVACHEVA, M.V.; NIKOL'SKAYA, V.S.; MAKHOV, G.I.; SKEGINA, A.V.; TARYEV, A.V.; KHOLINA, A.V.; BRYANSKIY, A.M.; BURMISTROVA, V.D.; GRIGOR'YEVA, A.N.; LUTSENKO, A.I.; OREKHOVA, Z.V.; TEPLINSKAYA, N.V.; FEKTISTOVA, V.I.; BUTORIN, I.M.; BOCHKAREVA, L.D.; BURENINA, V.A.; VETUSHKO, A.M.; VIKHLYAYEV, A.A.; SORCKIN, B.S.; TSYBENKO, L.T.; KHELEBNIKOV, V.N.; DUMNOV, D.I.; STEPANOVA, V.A.; MANYAKIN, V.I., red.; VAKHATOV, A.M.; MAKAROVA, O.K., red.izd-va; PYATAKOVA, N.D., tekhn.red.

[Soviet agriculture; a statistical manual] Sel'skoe khoziaistvo SSSR; statisticheski sbornik. Moskva, 1960. 665 p.

(MIRA 13:5)

1. Russia (1923- U.S.S.R.) Tsentral'noye statisticheskoye upravleniye. 2. Upravleniye statistiki sel'skogo khozyaystva Tsentral'nogo statisticheskogo upravleniya SSSR (for all except Makarova, Pyatakova).

(Agriculture--Statistics)

BOZADZHIEVA, E.; BAKALOV, D.; PAVLOVA, V.

On a modified method for the simultaneous determination of  
17-ketosteroids and 17-ketogenic steroids in the urine. *Suvr.*  
*med.* 14 no.3:45-51 '63.

(ADRENAL CORTEX HORMONES)  
(17-KETOSTEROIDS) (URINE)  
(ADRENAL CORTEX FUNCTION TESTS)

AUTHORS: Malinovski, Y., Pavlova, V. SOV/77-3-6-3/15

TITLE: The Influence of the Activity of the Gelatin on the Kinetics of Chemical Ripening (Vliyaniye aktivnosti zhelatiny na kinetiku khimicheskogo sozrevaniya)

PERIODICAL: Zhurnal nauchnoy i prikladnoy fotografii i kinematografii, 1958, Vol 3, Nr 6, pp 410-415 (USSR)

ABSTRACT: Emulsions prepared by identical formulae, but with different kinds of gelatin, yield emulsions of different sensitivity. This is connected with the so-called photographic activity of the gelatin which may be highly sensitive or inert. Research on the influence of the activity of the gelatin on the final sensitivity of the emulsion has led to different conclusions and opinions among researchers. The authors investigated a formerly-described formula for their experimental emulsion, with Soviet FZhZ gelatin, medium type being used. To avoid conglomeration of the grains during physical ripening, the excess potassium bromide was increased to 100 mole % and 2 mole percent of potassium iodide were added. Thus the grains of the emulsion grew equally. Upon physical ripening, for 40 minutes, their average mass was about  $1.2 \times 10^{-12}$  grams. Then the silver bromide grains of this first gelatin were set by

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SOV/77-3-6-3/15

The Influence of the Activity of the Gelatin on the Kinetics of Chemical Ripening

addition of sodium sulfate, to distinguish the effect of this physically ripened first gelatin from that of the chemically ripened second gelatin. Before the sulfate had been added, the ammonia of the emulsion was neutralized with sulphuric acid to pH 8, and then with acetic acid to pH 6.5. The emulsion was cooled to 35° C, and 0.75 per cent by volume of a 40% solution of crystalline sodium sulfate was added. The silver bromide settled fast in the form of a fine powder almost free from gelatin. It was washed 3 times and then centrifuged; hereby the sodium sulfate was entirely separated. Dispersion of the washed precipitate in a 2% gelatin solution at 35° C under intensive stirring for 30 minutes and ensuing dilution to the desired volume yielded, after 3 filtrations, the final emulsion. It was kept at 45° C, the pH was led to 8 and pBr to 4. Every 30 minutes samples were taken and cast on supports exposed under a sensitometric wedge-shaped transparent glass plate with a constant 0.1 and developed. The optical densities of the processed pieces were measured with the MF-2 microphotometer. The light sensitivity in arbitrary units was determined by the number of the field which had the optical

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SOV/77-3-6-3/15

The Influence of the Activity of the Gelatin on the Kinetics of Chemical Ripening

density 1 above fog. The experimental results yielded the following conclusion: If the first gelatin is more active than the second, the speed of the chemical ripening process may be lessened under the influence of the low activity of the second gelatin. If the second gelatin is entirely inert, the speed of the chemical ripening may become insignificantly low. If the second gelatin is more active than the first, the low activity of the first gelatin does not influence the kinetics of the chemical ripening nor the final sensitometric parameters of the emulsion. There are 5 sets of graphs and 6 references, 4 of which are Soviet, 1 French and 1 English

ASSOCIATION: Institut fizicheskoy khimii Bolgarskoy AN Sofiya, Bolgariya (The Institute of Physical Chemistry of the Bulgarian AS, Sofia, Bulgaria)

SUBMITTED: December 17, 1957

Card 3/3

BULGARIA

BOZADZHIEVA, E., D. BAKALOV, and V. PAVLOVA, Departments of Internal Medicine (Katedra po Vutreshni Bolesti) and of Medical Chemistry (Katedra po Meditsinska Khimiya), Higher Medical Institute (Visshi Meditsinski Institut), Sofia.

"A Modification for the Simultaneous Determination of 17-Ketosteroids and 17-Ketogenic Steroid in Urine."

Sofia, Suvremenna Meditsina, Vol 14, No 3, 1963, pp 45-51.

Abstract: [Authors' Russian summary modified] The modification involves several methodological improvements permitting fast and accurate work, especially for the needs of clinical diagnosis. The basic principles of elimination have been established with new material on both ill and healthy persons, viz., the level of 17-ketogenic steroid in men on the average is twice that in women. The functional state of the suprarenals can be assessed on the basis of such studies, but repeated examination is [1/1/essential. Recent Soviet and Western sources.

PAVLVA, V.

Singing iceberg. IUn. nat. no.6:36 Je '61.  
(Icebergs)

(MIRA 14:7)

PETROV, P.; PENCHEVA, E.; IOTOV, I.; PAVLOVA, V.

Mineral waters in the region of the Gaise Balchev Valley. Trudove  
vurkna inzh geol khidrol 3:184-205 '63.

1. Submitted December 4, 1963.

MALINOVSKIY, Y.; PAVLOVA, V.

Influence of the activity of the gelatin on the kinetics of  
chemical ripening. Zhur.nauch. i prikl.fot. 1 kn. 3 no.6:  
410-415 N-D '58. (MIRA 11:12)

1. Institut fizicheskoy khimii Belgarskoy AN Sofiya, Bolgariya.  
(Photographic emulsions)

PAVLOVA, V.

"Objectives of the History of Medicine", p. 45. "Socialist Legality on Guard for the People's Interests. Tr. from Russian", p. 58. (MEDICINSKO ZEMIC, Vol. 6, no.3, June 1955, Sofia, Bulgaria).

SO: Monthly List of East European Accessions, LC, Vol. 3, No. 4, April 1954.

MITROFANOV, V.V.; PAVLOVA, V.A.; PEYKHTFEN, M.I.

Physicochemical analysis of the mechanism of the antifibrinolytic  
action of bis-(1-phenyl tetrazolyl-5)-disulfide. Zhur. nauki.  
i prikl. iet. i kin. 10 no.3:273-276 Ji-Ag '65.

UMI 19

Leningradskiy Institut khimicheskoy energiy.

PAVLOVA, V.A.

Research on benzimidazole and its nitro- and methyl derivatives.  
Zhur. nauch. i prikl. fot. i kin. 3 no.2:101-111 Mr-Apr '58.

(MIRA 11:5)

Leningradskiy institut kinoinzhenerov.  
(Benzimidazole)



*PAVLOVA, V.A.*

PETROV, I.S.; SOBOLEV, N.V.; TSIMMERL'ZON, M.R.; PAVLOVA, V.A.

Boiling staple fabrics with peroxide in IvNITI kiers. Tekst. prom.  
17 no.3:40-41 Mr '57. (MLRA 10:4)  
(Cotton finishing) (Bleaching) (Hydrogen peroxide)

PAVLOVA, V.A.; FAYBERMAN, G.P.

Reaction of phenyl mercaptan tetrazole with silver ions. Trudy  
LIXI no.3:175-178 '55. (MLRA 9:8)

1. Kafedra tekhnologii proizvodstva kinofotomaterialov.  
(Photographic emulsion.) (Tetrazole)

PAVLOVA, V.A.; SARUKHANOVA, N.A.

Using data on fluorescence analysis and coefficients of thermal expansion of petroleum for correlating petroliferous strata.  
Truda AzNII DN no.4:288-295 '56. (MIRA 14:4)  
(Geology, Stratigraphic) (Oil sands--Analysis)  
(Fluorescence)

MATVEYEVA, T.V.; TYUKINA, M.N.; PAVLOVA, V.A.; TOMASHOV, N.D.

Investigating the anodic oxidation of titanium in sulfuric acid solutions. Titan i ego splavy no.6:211-220 '61. (MIRA 14:11)  
(Titanium--Electrometallurgy) (Oxidation, Electrolytic)

L 15752-66		BT(m)/T/BRP(t)/BRP(b)		IAP(c)		JD/GS	
ACC NR: AT5027957		SOURCE CODE: UR/0000/65/000/000/0216/0218					
AUTHOR: Gorbunov, N. S. (Doctor of chemical sciences); Latukhova, A. G.; Kievtsur, S. A.; Pavlova, V. A.							
ORG: none							
TITLE: Diffusion of silicon coatings on copper <span style="float: right;">60 81</span>							
SOURCE: Seminar po zharostoykim pokrytiyam. Leningrad, 1964. Zharostoykiye pokrytiya (Heat-resistant coatings); trudy seminarov. Leningrad, Izd-vo Nauka, 1965, 216-218							
TOPIC TAGS: electrolyte, copper, silicon, internal stress, crystal lattice structure							
ABSTRACT: Electrolytically applied coatings on copper suffered large internal stresses during abrupt variations of temperature. This resulted in the cracking and peeling off of the coatings. Experiments on the diffusion coating of copper disk samples were made in the flow of dried hydrogen in an apparatus (see fig.) consisting of a Kip generator 1 for the production of H by the reaction of							
1/2							
2/2 SYN							

S/137/62/000/006/144/163  
A057/A101

AUTHORS: Matveyeva, T. V., Tyukina, M. N., Pavlova, V. A., Tomashov, N. D.

TITLE: Investigation of the anodic oxidation of titanium in sulfuric acid solutions

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 6, 1962, 97, abstract 6I612 (V sb. "Titan i yego splavy". no. 6, Moscow, AN SSSR, 1961, 211 - 22)

TEXT: Annealed Ti sheets with  $\delta$  14.8% and the following chemical composition were investigated (in %): Fe 0.13, Ni 0.15, Si 0.17, C 0.050, N 0.098, Ca 0.34. The anodizing was carried out in  $H_2SO_4$  solutions. Properties of the coatings were investigated in dependence on the conditions of anodizing: the concentration and temperature of the acid, the duration of anodizing, and  $D_a$ . The anodic oxidation of Ti proceeds in  $H_2SO_4$  solutions at room temperature at high voltage at the terminals, therefore coatings of low quality are obtained. An increase of the temperature of the acid, especially to 80°C and more, decreases the voltage on the terminals yielding thus coatings with better protective properties. The following optimum conditions of anodizing are presented: 1) 18%  $H_2SO_4$

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Investigation of the...

S/137/62/000/000/144/163  
A057/A101

solution, temperature 80°C,  $D_a$  0.5 a/dm<sup>2</sup>, duration of anodic oxidation 2 - 8 hrs,  
2) 18% H<sub>2</sub>SO<sub>4</sub> solution, temperature 100°C,  $D_a$  2 a/dm<sup>2</sup>, duration of anodic oxidation 2 hrs. There are 14 references.

Ye. Layner

[Abstracter's note: Complete translation]

Card 2/2

S/081/62/000/013/024/054  
B177/B101

**AUTHORS:** Matveyeva, T. V., Tyukina, M. P., Pavlova, V. A.,  
Tomashov, N. D.

**TITLE:** Research on the anodizing of titanium in sulfuric acid  
solutions

**PERIODICAL:** Referativnyy zhurnal. Khimiya, no. 13, 1962, 410, abstract  
13K166 (Sb. "Titan i yego splavy". no. 6. M., AN SSSR,  
1961, 211-220)

**TEXT:** Research into a process of anodizing Ti is described. The  
composition (in %) tested was Fe 0.13; Ni 0.15; Si 0.17; C 0.05;  
N<sub>2</sub> 0.098, Cu0.34; with Ti forming the remainder in solutions of H<sub>2</sub>SO<sub>4</sub>.  
The authors studied the growth and properties of the films in relation  
to the time of anodizing (up to 8 hours); D<sub>a</sub> (1-10 a/dm<sup>2</sup>); temperature  
(20-100°C) and concentration of H<sub>2</sub>SO<sub>4</sub> (0-80 %). Anodizing of Ti in H<sub>2</sub>SO<sub>4</sub>  
at about 20°C occurs at a high terminal voltage (up to 100 v) and results

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1087

21038

S/598/61/000/006/028/034  
D217/D303

AUTHORS: Matveyeva, T.V., Tyukina, M.N., Pavlova, V.A., and Tomashov, N.D.

TITLE: Investigating the anodic oxidation of titanium in sulphuric acid solutions

SOURCE: Akademiya nauk SSSR. Institut metallurgii. Titan i yego splavy. no. 6, 1961. Metallotermya i elektrokhiymiya titana, 211 - 220

TEXT: The results of investigating the anodic oxidation of Ti in aqueous H<sub>2</sub>SO<sub>4</sub> solutions and the properties of the oxide films in relation to the conditions of anodizing (concentration and temperature of electrolyte, time of anodizing and anodic current density) are reported. The material studied was annealed Ti sheet from an experimental batch, having an elongation of 14.8%, produced powdermetallurgically and having the following chemical composition 0.13 % Fe, 0.15 % Ni, 0.17 % Si, 0.050 % C, 0.098 % N<sub>2</sub> and 0.34 % Ca. Ti iodide and Ti of specification VT1 were used as reference specimens in individual experiments. The specimens were cleaned  
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Investigating the anodic oxidation ...

S/598/61/<sup>21038</sup>000/006/028/034  
D217/D303

with emery paper, degreased with acetone, etched for 15 seconds at room temperature in a solution consisting of 15 % HF and 5 % HNO<sub>3</sub> and rinsed with water. Anodizing was carried out in the same way as for Al. The solution was agitated and the current was supplied across anodized Ti terminals. In the course of anodizing, the voltage was changed, the anodic current density being kept constant. The properties of the films obtained were determined by means of a drop method developed by the authors, using a solution consisting of 1.22 % HF, 0.91 % HNO<sub>3</sub>, remainder - water. The time taken for intense evolution of gas bubbles to begin after application of a drop of the above solution to a restricted film surface, was noted. Films possessing the best protective properties (according to their drop test performance), were also tested for their corrosion resistance by semi-immersing the specimens in 40 and 75 % solutions of H<sub>2</sub>SO<sub>4</sub> at 30°. The weight of the films was determined from the loss in weight sustained by the anodized specimens on removing the film. The films were removed by cathodic polarization without noticeable dissolution of metallic Ti, using a current of 1.5 mA/cm<sup>2</sup> in a 20 % H<sub>3</sub>PO<sub>4</sub> solution with addition of 0.1 % CrO<sub>3</sub> at 80°. The film thick-

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D217/D303

Investigating the anodic oxidation ...

ness was calculated from the weight. It is shown that anodic oxidation of Ti in  $H_2SO_4$  solutions at room temperature requires a high terminal voltage, as a result of which films of low quality form. Raising the temperature of the electrolyte to  $80^\circ$  and above, results in a decrease in terminal voltage and enables films of better protective qualities to be obtained. The following methods of anodizing Ti in  $H_2SO_4$  solutions were found to give satisfactory results: 1) 18%  $H_2SO_4$  solution, temperature:  $80^\circ$ , anodic current density:  $0.5 A/dm^2$ , anodizing time: 2 - 8 hours; 2) 18%  $H_2SO_4$  solution, temperature:  $100^\circ$ , anodic current density:  $2 A/dm^2$ , time of anodizing: 2 hours. There are 9 figures, 3 tables and 14 references: 3 Soviet-bloc and 11 non-Soviet-bloc. The 4 most recent references to the English-language publications read as follows: P.D. Miller, R.A. Jefferys, and H.A. Pray, Metal Progress, 1956, 69, 61; H.A. Johansen, G.B. Adams and P. van Rysselberghe, J. Electrochem. Soc., 1957, 104, 339; H. Richard, Metal Finishing Journal, 1957, 3, 10; H. Nagasaki, H. Ishida, Keikindzoky Light Metals, 1958, 8, 60.

Card 3/3

KUTNAYA, G.V., instruktor; PAVLOVA, V.A., instruktor.

Importance of exercise therapy for children with rheumatic fever.  
Med. sestra 19 no. 10:35-37 0 '60. (MIRA 13:10)

1. Kabinet lechebnoy fizkul'tury Instituta pediatrii AMN SSSR.  
(EXERCISE THERAPY) (RHEUMATIC FEVER)

PAVLOVA, V.A.; FAYERMAN, G.P.

Interaction of di-(phenyltetrazole) disulfide and phenylmercapto-  
tetrazole with silver ions. Usp. nauch. fot. vol.5:95-106 '57.  
(Tetrazole) (Mercapto compounds) (Silver) (MIRA 10:6)

AKHMEDOV, G.A.; KHATSKEVICH, N.I.; LISTENGARTEN, R.M.; PAVLOVA, V.A.;  
SARIKHANOVA, N.A.

Possible oil-forming series in Cretaceous sediments of the  
Caspian-Kuba area. Trudy AzNII DN no.10:19-30 '60. (MIRA 14:4)  
(Azerbaijan--Petroleum geology)

PAVLOVA, V.A.

Multiple echinococcosis. Arkh.pat. 22 no.9:66-68 '60.

(MIRA 13:12)

(HYDATIDS)

24012

S:080/81/031:006/015/020  
D247/D305

18 8500

AUTHORS: Matveyeva, T.V., Tyukina, M.N., and Pavlova, V.A.

TITLE: Dependence of the rate of corrosion of anodized binary aluminum-base alloys on their copper content

PERIODICAL: Zhurnal prikladnoy khimii, v. 34, no. 6, 1961, 1365 - 1367

TEXT: The role of copper concentration on the rate of corrosion of aluminum alloys and the properties of anodic oxide films, produced on their surfaces, was investigated. The rate of corrosion was determined by the volume of oxygen absorbed and hydrogen evolved, using an apparatus described by M.D. Tomashov and T.V. Matveyeva (Ref. 3: Tr. Inst. fiz. khim. AN SSSR, 5, 2, 39, 1951). Binary aluminum-base alloys containing 1.9, 2.35, 3.96, 5.48 and 7.03 % copper were tested, the materials used for the preparation of the alloys being ABOOO (AVOOO) aluminum (99.99 %) and spectra optically pure copper. All alloys were homogenized at a temperature of 485°C

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Dependence of the rate of ...

for 240 hours, followed by quenching in water at room temperature. Metallographic analysis showed that alloys containing up to 3.96 % copper were homogeneous solid solutions. Alloys containing 5.48 and 7.63 % Cu consisted of a mixture of solid solution and eutectic. Anodic oxidation was carried out in a 4N sulphuric acid solution at a current density of 1 A/dm<sup>2</sup> and a temperature of 25° for 20 minutes. The thickness of the films produced was 5 - 7 μ. Corrosion tests were carried out by fully immersing the specimens in a 0.5 N sodium chloride solution at a temperature of 25° and a pressure of 760 mm Hg. Fig. 1 shows the relationship between volume of hydrogen evolved (and oxygen absorbed) and time in the corrosion of anodized aluminum alloys of various copper contents, and Fig. 2 shows the same relationship for non-anodized alloys. From these two graphs it can be seen that corrosion of the alloys tested in a 0.5 N sodium chloride solution takes place with mixed oxygen-hydrogen depolarization. In still, thermostatically controlled solutions of the above composition, the rate of corrosion of Al-Cu alloys, anodized by the normal sulphuric acid method, is approximately

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half that of non-anodized alloys. As the copper content increases, so the rate of corrosion increases, at first essentially due to an increase in the rate of depolarization by oxygen, and subsequently only due to depolarization by hydrogen. There are 2 figures and 3 Soviet-bloc references.

SUBMITTED: July 19, 1960

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PAVLOVA, V.A. 11A

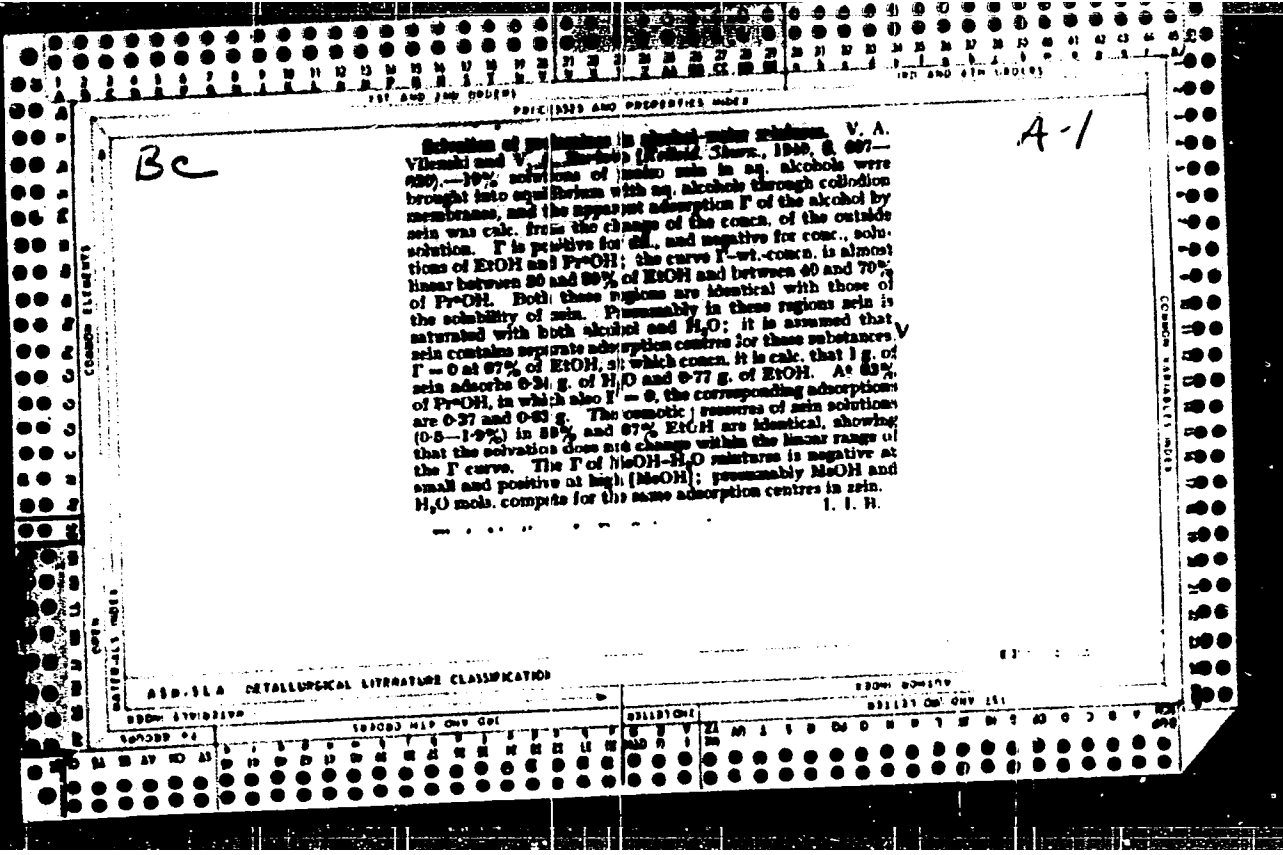
PROCESSES AND PROPERTIES INDEX

Solvation of proteins in alcohol-water mixtures. V. A. Pavlova and V. A. Lazhko, *Colloid J. (U. S. S. R.)* 6, 607-20(1944). The curves of sorption of MeOH, EtOH and PrOH from eq. solns. by zein were prepd. by the method of equil. dialysis. The S form of the sorption curves of EtOH and PrOH shows that in these systems zein swabs water and alc. simultaneously, the sorption of each component depending on its activity in the solns. The rectilinear character of the middle portion of sorption curves and the equality of osmotic pressure of zein solns in 55 and 67.5% solns. of EtOH are considered proof that the hydration and solvation with alc. are const. in this region. The combined type of solvation (the complex solvate various groups of the dissolved substances) was observed in the systems zein-water-EtOH and zein-water-MeOH. The sorption curve of the system zein-water-MeOH is of reversed S form. This is explained by the assumption that MeOH and water during solvation of zein compete with each other; with an increase of alc. concn. it displaces water from the solvation layer and *vice versa*.

A. A. Polozovay

ASS-35A METALLURGICAL LITERATURE CLASSIFICATION

NO. 1	NO. 2	NO. 3	NO. 4	NO. 5	NO. 6	NO. 7	NO. 8	NO. 9	NO. 10	NO. 11	NO. 12	NO. 13	NO. 14	NO. 15	NO. 16	NO. 17	NO. 18	NO. 19	NO. 20	



MUKHINA, T.N.; PAVLOVA, V.B.

Refined low-octane gasolines as raw material for the production of lower olefins. Neftekhimia 1 no.3:382-385  
My-Je '61. (MIRA 16:11)

1. Nauchno-issledovatel'skiy institut sinteticheskikh  
spirtov i organicheskikh produktov.

TYURYAYEV, I.Ya.; MUKHINA, T.N.; PAVLOVA; V.B.; KOLYASKINA, G.M.

Reaction rate of propane dehydrogenation on a stationary catalyst.  
Khim. i tekhn. topl. i masel 3 no.12:9-15 D '58. (MIRA 11:12)

1.Nauchno-issledovatel'skiy institut sukhikh subtropikov.  
(Propane) (Dehydrogenation)

SOV/65-58-12-3/16

**AUTHORS:** Tyuryayev, I. Ya; Mukhina, T. N; Pavlova, V. B. and Kolyaskina, G. M.

**TITLE:** The Reaction Rate During Dehydrogenation of Propane on a Stationary Catalyst (Skorost' reaktsiy pri degidrirovaniy propana na nepodvizhnom katalizatore)

**PERIODICAL:** Khimiya i Tekhnologiya Topliv i Masel, 1958, Nr 12, pp 9 - 15 (USSR)

**ABSTRACT:** During the catalytic dehydrogenation of propane, a number of side reactions take place which lead to the formation of methane, ethylene, ethane and a small quantity of C<sub>4</sub> hydrocarbons, as well as to the formation and deposition of coke on the catalyst. This reduces the yield of propylene and decreases the activity of the catalyst. It is necessary to know the reaction rates of the basic and side reactions as the rate of the basic reaction determines the yield of propylene during one throughput, and the rate of the side reactions the yield of propylene on the decomposed propane. The catalytic dehydrogenation of propane can be described by three reactions: dehydrogenation, cracking and coke formation. The kinetics of dehydrogenation of the lower paraffins has been described by many authors (Refs. 3 - 7), and the kinetics of thermal and catalytic cracking of

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SOV/65-58-12-3/18

## The Reaction Rate During Dehydrogenation of Propane on a Stationary Catalyst

hydrocarbons was also investigated (Ref.1 and 9). The rate of coke formation on an aluminium-chrome catalyst was investigated during the dehydrogenation of n-butane. Propane was catalytically dehydrogenated in a quartz reactor (diameter equals 22mm). The temperatures were registered on the potentiometer PP. The catalyst granules had a diameter of 1 mm. 10 cm<sup>3</sup> of catalyst was used. The rates of dehydrogenation and cracking were defined at 550, 570 and 590°C when using practically pure propane, & the rate of coke deposition in a second series of experiments at 570, 590, 590, 600 and 610°C when using 94.9% propane. The dehydrogenation and cracking experiments were carried out for thirty minutes. The gas was analysed on a GIAP instrument and on a TsiATIM-51V device. During these experiments at decreased partial pressure, purified nitrogen was used as diluent. Results on the dehydrogenation of propane at atmospheric pressure are given in Table 1, and all further data necessary for calculating the coefficients of the kinetic equations in Figs.1, 2 and 3. Table 2: data for the graphical determination of the coefficients and values of these coefficients.

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The Reaction Rate During Dehydrogenation of Propane on a Stationary Catalyst

SOV/65-58-12-3/16

Equations for calculating the rates of dehydrogenation, cracking and carbon deposition during the dehydrogenation of propane are given, as well as the dependence of the coefficients of these equations on the temperature. These equations form the basis for calculating the yields of propylene with regard to propane (for one cycle), with regard to the decomposed propane, and also the poisoning of the catalyst during various process conditions. There are 4 Figures, 2 Tables and 10 References: 4 English and 6 Soviet.

ASSOCIATION: NIISS

Card 3/3

Z/011/62/019/001/013/017  
E073/E136

AUTHORS: Mukhina, T.N., and Pavlova, V.B.

TITLE: Low-octane benzines from platforming and hydroforming  
as raw material for producing lower olefins

PERIODICAL: Chemie a chemická technologie. Přehled technické a  
hospodářské literatury, v.19, no.1, 1962, 34,  
abstract Ch 62-474. (Neftekhimiya, v.1, no.3, 1961,  
382-385)

TEXT: Optimum conditions of pyrolysis of benzines to ethyl,  
propyl, butylene, divinyl and aromatic hydrocarbons are dealt  
with. The possibility of industrial utilization of the process  
is considered. ✓  
2 figures, 2 tables.

[Abstractor's note: Complete translation.]

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L 45038-65 EPA(a)-2/EIT(m)/EPP(a)/EWE(j)/1

20-4/FR-4/Pt-7 RM

ACCESSION NR: AP5009328

3/0191/65/000/004/0075/0076

AUTHORS: Zinevich, A. M.; Sinogub-Lavrenko, A. A.; Pavlova, V. G.

38  
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TITLE: Some surface properties of polyethylene films produced in an electric field

SOURCE: Plasticheskiye massy, no. 4, 1965, 75-76

TOPIC TAGS: polyethylene, electric field, hydrophobization, thermostabilization

ABSTRACT: Films of low-density polyethylene are highly water repellent, but oxidation as a result of chemical treatment reverses this, and the surface becomes hydrophilic. Corona discharges with generation of ozone lower the hydrophobic quality of polyethylene films but do not make them hydrophilic. The effect of an electrical field was studied, without corona discharge or any appreciable generation of ozone, on the surface properties of polyethylene. The contact angle of wetting pure polyethylene in mixtures with stabilizers was measured. Two types of samples were studied: powdered, before and after subject to an electrical field, and film. The powdered material was pressed into tablets 5 mm in diameter and 3 mm in thickness. Results show that an electrical field lowers the hydrophobic quality of powdered mixtures, but only temporarily.

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L 15138-65

ACCESSION NR: AP5009328

removal of the field restores the original state. The molecular character of the surface thus remains unchanged. Films obtained by fusing high-density polyethylene on a metallic base at 160C are characterized by a hydrophobic surface. The degree of this hydrophobic quality declines with increase in temperature of formation. The introduction of thermostabilizers permits production of polyethylene films at a higher temperature. Changes in the surface properties of the films obtained depend in great measure on the chemical nature of thermostabilizers. Orig. art. has: 1 table.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MT, 00

NO REF SOV: 002

OTHER: 003