

PRVALUKHINA, A. F., Cand Geog Sci -- (diss) "The Upper Bikini  
Depression (phys-geog characteristic)." Len, 1958, 17 pp. ~~transl~~  
(Leningr Order of Lenin State Univ im A. A. Zhdanov), 100 copies.  
(KL, 9-53, 114)

- 21 -

**"APPROVED FOR RELEASE: 06/15/2000**

CIA-RDP86-00513R001343420012-1

1964. Mira 18:3. No. 38-103 '64. (MIRA 18:3)

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343420012-1"

PRYALUKHINA, A.F.

Landscape peculiarities of the upper Bikin depression. Izv.Vses.  
geog.ob-va 89 no.3:234-239 My-Je '57. (MIRA 10:11)  
(Bikin Valley--Physical geography)

VERGUNOV, G.P.; PRYALUKHINA, A.F.

Pliocene sediments in the Kurile Islands. Dokl. AN SSSR 152  
no.6:1420-1423 O '63. (MIRA 16:11)

1. Sakhalinskiy kompleksnyy nauchno-issledovatel'skiy institut  
Sibirskogo otdeleniya AN SSSR. Predstavлено akademikom D.I.  
Shcherbakovym.

PRYALUKHINA, A.F.

Materials on the stratigraphy of the southern Kurile Islands. Trudy  
Sakh.kompl.nauch.-issl. inst. AN SSSR no.10:3-13 '61. (MIRA 15:6)  
(Kurile Islands--Geology, Stratigraphic)

PRYALUKHINA, A.F.

Occurrence of inversions of natural phenomena along the upper reaches of the Bikin River (central Sikhote-Alin' Range). Izv. Sib. otd. AN SSSR no.11;118-122 '58. (MIRA 12:2)

1. Salchalinsky kompleksnyy nauchno-issledovatel'skiy institut  
AN SSSR.  
(Bikin Valley--Vegetation and climate)

PRYAMKOV, A.

Pryamkov, A. "The strong scientist Semen Vlasov (1789 - 1821)", Yarosl. al'mamakh,  
'Yaroslavl', 1948, o. 277-78

SO: U-3042, 11 March 53. )Letopis 'Zhurnal 'nykh Statey, No. 7 1949)/

SPIVAK, G.V.; IGRAS, E.; PRYAMIKOVA, I.A.; ZHELUDOV, I.S.

Observation of the domain structure of barium titanate by  
means of an electron mirror. Kristallografiia 4 no.1:123-  
125 Ja-F '59. (MIRA 12:4)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.  
(Barium titanate crystals)  
(Electron diffraction examination)

"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343420012-1

YAKOVLEV, V. A. "Faunistic Survey of the Blister Beetle Fauna of the USSR." Izv. Akad. Nauk SSSR, Inst. Zool., No. 1, Jan 55.

"Faunistic Survey of the Blister Beetle Fauna of the USSR." Izv. Akad. Nauk SSSR, Inst. Zool., No. 1, Jan 55.

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343420012-1"

PRYAMKOVA, M.A.; YUKHNEVICH, L.A.

Key to the primary larvae of blister beetles of the tribe Mylabrini  
(Coleoptera, Meloidae) in the fauna of the U.S.S.R. Ent. oboz. 37  
no.1:176-182 '58. (MIRA 11:3)

1. Institut zoologii AN KazSSR, Alma-Ata.  
(Blister beetles) (Larvae--Insects)

Central Institute of Agricultural Spec. Zoology, Insects and  
Entomophagous Insects - Systematics and  
Ethnobiology.

Acad. of Agricultural Sciences, Moscow, 325, No. 6932

S. A. Slobodkin, M. A. Yarilin, L. N.

Determination Key for First Instar Larvae  
of Elated Beetles of the Tribe Mylabrini  
(Coleoptera, Meloidae) in Fauna of the USSR  
(Entomol. obozreniye, 1938, 17, No. 1),  
176 pp.

Identification tables of triangulations of  
*Mylabris* are given separately for subgenera  
(9) and species (29).

DUBOVA, L.S.; BERESTNEV, V.A.; NAGLASEVA, I.P.; Prinimali uchastiye:  
ALEKSEYeva, Ye.S.; PRYAMIKOVA, T.S.

Studying the double refraction of some polyamide fibers.  
Khim.volok. no.5:52-55 '64. (MIPA 17:1G)

1. Nauchno-issledovatel'skiy institut shveychnoy promyshlennosti.

82158  
S/048/60/024/06/03/017  
B019/B067

9.3120

AUTHORS: Spivak, G. V., Pryamkova, I. A., Sedov, N. N.

TITLE: On the Formation of the Electron Optical Contrast in the  
Observation of "Hollow Spots" in Emitters

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya,  
1960, Vol. 24, No. 6, pp. 640-646

TEXT: This is the reproduction of a lecture delivered at the 9th All-Union Conference on Cathode Electronics from October 21 to 28, 1959 in Moscow. Contrast problems of emission and of quasi-emission (mirror-type) electron optical systems were investigated. In the first chapter, the authors describe the influence exercised by the normal and the tangential component of the electric field on electron kinetics, and in the second chapter they deal with the mechanism of formation of the contrast. The reformation of "hollow spots" due to local potential differences of the reflecting electrode is explained, and the fact that the microfields of these electrodes can be investigated at any temperature is shown to be the most important property of this type of electrodes. The influence

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On the Formation of the Electron Optical  
Contrast in the Observation of "Hollow Spots"  
in Emitters

82158  
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B019/B067

exercised by "hollow spots" on the resolving power of an immersion objective is briefly dealt with, and in the following the local micro-fields on emitting surfaces are discussed in detail. Here, "hollow spots" observed by the authors on polished, well activated diodes consisting of copper-aluminum-magnesium alloys and on rather smooth L-cathodes (Ref. 1) are described. By comparing the secondary electron emission images and the thermionic emission images the authors observed that the former are caused by the roughness, and the latter by the inhomogeneities of the work function, i.e., by the "hollow spots". The formation of the contrast in oxide cathodes was investigated in detail where the formation of the mirror image, the thermal image, and the photoemission image were studied. For this purpose, the combined electron microscope shown in Fig. 4 was used. It was found that the geometrical relief of the cathode surface, the "hollow spots" and the electric microfields play an important part in the formation of contrast. In the final chapter, some typical cases of the formation and the inversion of the contrast by superposition of micro-fields are discussed. There are 5 figures and 10 Soviet references.

X

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On the Formation of the Electron Optical  
Contrast in the Observation of "Hollow Spots"  
in Emitters

82158

S/048/60/024/06/03/017  
B019/B067

ASSOCIATION: Fizicheskiy fakul'tet Moskovskogo gos. universiteta im.  
M. V. Lomonosova  
(Physics Department of Moscow State University imeni  
M. V. Lomonosov)

Card 3/3

X

SPIVAK, G.V.; PRYANKOVA, I.A.; SEDOV, N.N.

Formation of electron optical contrast during the observation of  
"fields of spots" on emitters. Izv.AN SSSR 24 no.6:640-646 Je  
'60. (MIRA 13:7)

1. Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta  
imeni M.V.Lomonosova.  
(Electron optics)

SOV/109-3-8-15/18

AUTHORS: Spivak, G.V., Dubinina, Ye.M., Sbitnikova, I.S.,  
Pryamkova, I.A. and Vinogradov, D.P.

TITLE: Development of the Methods of Electron Microscopy for  
the Observation of the Microgeometry and the Emission  
Centres of Thermionic Cathodes (Razvitiye metodov elek-  
tronnoy mikroskopii dlya natlyudeniya mikrogeometrii i  
tsentrov emissii termokatodov)

PERIODICAL: Radiotekhnika i Elektronika, 1958, Vol 3, Nr 6,  
pp 1077 - 1083 + 1 plate (USSR)

ABSTRACT: The article reports the results of the observations of  
the electron-microscopy pictures of the distribution of  
the emission in a number of thermionic cathodes such as  
an oxide cathode, an L-cathode or an impregnated cathode.  
The observations were carried out at magnifications  
ranging from 150 - 4 000. During the investigations, it  
was found that the space charge has a significant effect  
on the formation of electron-microscopic images, in  
particular, when employing the secondary-electron emission  
technique. The space charge produces a decelerating  
field whose effect can be interpreted by means of two  
space-charge lenses. The first type of lens is a macro-  
lens and is produced by the charge in that part of the

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SOV/109-3-8-15/18

Development of the Methods of Electron Microscopy for the  
Observation of the Microgeometry and the Emission Centres of  
Thermionic Cathodes

cathode from which the emission current is not conducted away. The second lens is a micro-lens and its effect becomes significant in the individual emission centres. The effect of the space charge is illustrated by the photographs of Figure 1. Photograph 1a was obtained at a current density (at the screen) of

$4 \times 10^{-8} \text{ A/cm}^2$  while Photograph 1b was taken at a density of  $1.4 \times 10^{-7} \text{ A/cm}^2$ ; in both cases, the anode voltage was 10 kv. Photograph 1c was done at the current density of  $1.4 \times 10^{-7} \text{ A/cm}^2$  but the cathode was removed from the focusing electrode by a distance of 75  $\mu$ . From these pictures, it follows that the space charge results in a change of the focus length of the system. It was also found during the investigations that the contrast in the photographs is dependent on the microgeometry of the investigated surfaces. The contrast is further dependent on the difference in the secondary emission coefficients of various parts of the cathode and on the

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SOV/109-3-8-15/18

Development of the Methods of Electron Microscopy for the Observation  
of the Microgeometry and the Emission Centres of Thermionic Cathodes

local electric fields at the cathode surface. The investigation of the relationship between the microgeometry of a cathode and its emission pattern (see picture) was effected by means of the EEM75-type microscope which was fitted with a special adaptor unit. The pictures obtained by this means are shown in the photographs of Figures 2, 3 and 4. The photographs of Figure 2 give the patterns of an oxide cathode having comparatively large non-uniformities at the surface; Photograph 2a refers to a cold cathode, while 2b is for a heated, activated cathode. Figure 3a shows the secondary-emission pattern of an L-cathode, while Figure 3b gives the thermal-emission pattern of the same cathode. Figure 4a shows the pattern of a pressed cathode, taken by means of the secondary emission. Figure 4c shows the same cathode but at an increased temperature, while 4b corresponds to the temperature at which the thermal emission commences. Figure 4d represents the thermal-emission pattern of the pressed cathode. All the investigations were carried out at a pressure of  $10^{-5}$  mmHg. For the purpose of obtaining magnifications of the order of 2 000

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SOV/109-3-8-15/18

Development of the Methods of Electron Microscopy for the Observation  
of the Microgeometry and the Emission Centres of Thermionic Cathodes

up to 4 000, a stroboscopic, electrostatic electron microscope (type ESM-50) was used. By means of this instrument, the pulse emission picture of an L-cathode was obtained. The resulting photograph is shown in Figure 5. The authors express their gratitude to M.A. Bruk for valuable advice. There are 5 figures and 8 references, 7 of which are Soviet and 1 French.

ASSOCIATION: Fizicheskiy fakul'tet  
Moskovskogo gosudarstvennogo universiteta im.  
M.V. Lomonosova ( Physics Department, Moscow State  
University imeni M.V. Lomonosov)

SUBMITTED: January 29, 1958  
Card 4/4      1. Electron microscopy    2. Cathodes (Electron tubes)--Physical  
properties    3. Thermionic emission--Analysis    4. Electron  
microscopes--Performance

SPIVAK, G.V.; PRYAMKOVA, I.A.; FETISOV, D.V.; KABANOV, A.N.; LAZAREVA, L.V.;  
SHILINA, A.I.

Mirror-type electron microscope for studying surface structures.  
Izv.AN SSSR.Ser.fiz. 25 no.6:683-690 Je '61. (MIRA 14:6)

1. Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta  
im. M.V.Lomonosova. (Electron microscope)

S/058/61/000/012/055/083  
A058/A101

AUTHORS: Spivak, G.V., Pryamkova, I.A.

TITLE: Development of an electron-mirror method for visualizing domain structure in ferromagnetics

PERIODICAL: Referativnyy zhurnal. Fizika, no. 12, 1961, 383, abstract 12E685 (V sb. "Magnitn. struktura ferromagnetikov", Novosibirsk, Sib. otd. AN SSSR, 1960, 185 - 189)

TEXT: There is described a glass model of a direct electron mirror in which in contrast to earlier models (RZhFiz, 1956, no. 9, 25867) - the reflected and the primary electron beams are not specially separated. The primary beam passes through an aperture in the screen, approaches the investigated object, is reflected and, after being focused, hits the screen. This makes it possible to increase the magnification and sensitivity of the instrument. With the aid of the described electron mirror there were observed domain structures in different ferromagnetics. A metallic model of the direct electron mirror with electron-optical magnification ~ 250 is also described. Problems are discussed concerning formation of images of domain microfields in the mirror.

[Abstracter's note: Complete translation]

N. Sedov

Card 1/1

SCOV/70-4-1-24/26

AUTHORS: Spivak, G.V., Igras, E., Pryamkova, I.A. and  
Zheludev, I.S.

TITLE: Observations of the Domain Structure of Barium Titanate by  
Means of an Electron Mirror (O nablyudenii domennoy  
struktury titanata bariya pri pomoshchi elektronnogo  
zerkala)

PERIODICAL: Kristallografiya, 1959, Vol 4, Nr 1, pp 123 - 125  
+ 1 plate (USSR)

ABSTRACT: It has been shown that it is possible to obtain by means  
of an electron mirror a qualitative representation of  
the domain structure of a ferroelectric with a magnifi-  
cation of up to several hundred times. The mechanism of  
image formation differs from that in optical polarisation  
microscopy. Earlier devices (Ref 2) used a magnetic  
field for the "magnetic contrast effect" but this caused  
instability. An electron beam from a gun is accelerated  
by 20 KV and passes through a hole in a fluorescent  
screen to the specimen where it is reflected. The system  
is roughly analogous to that of an ordinary microscope  
with incident illumination supplied through the eyepiece.

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SOV/70-4-1-24/26  
Observations of the Domain Structure of Barium Titanate by Means of  
an Electron Mirror

Examples are reproduced of images from BaTiO<sub>3</sub> single crystals at 800X and 150X and a resolution of about 200 lines/mm was achieved. The reflection of the slow electrons is due to the fringing field between the domains. There are 5 figures and 10 references, 6 of which are Soviet, 3 English and 1 French.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova (Moscow State University imeni M.V. Lomonosova)

SUBMITTED: August 10, 1958

Card 2/2

AUTHORS: Spivak, G. V., Pryamkova, I. A., Igras, E. SOV/48-23-6-15/28

TITLE: On the Investigation of the Domains of Ferromagnetics and  
Ferroelectrics by Means of an Electron Mirror (O nablyudenii  
domenov ferromagnetikov i segnetoelektrikov pri pomoshchi  
elektronnogo zerkala)

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959,  
Vol 23, Nr 6, pp 729-733 (USSR)

ABSTRACT: In the introduction the advantages offered by the electron  
mirror, as e.g. the fact that here the object is not bombarded  
with electrons and a considerable resolving power exists, are  
enumerated. The working methods with electron mirrors have  
already been dealt with by the authors in papers published at  
an earlier date (Refs 1, 2), while others investigated the  
resolving power. The influence exercised by the strong macro-  
field upon the weak microfields of the surface is dealt with,  
and reference is made to the aforementioned papers. Further,  
the mechanism of contrast formation is dealt with in the intro-  
duction. The second part deals with the investigation of the  
structure of domains of monocrystals of ferromagnetics in the  
electron mirror. In this connection, the investigations carried

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On the Investigation of the Domains of Ferromagnetics  
and Ferroelectrics by Means of an Electron Mirror

SOV/48-23-6-15/26

out by the authors in 1955 (Ref 1) are mentioned, in which the possibility of obtaining a magnetic contrast was pointed out. An instrument of this construction with axial symmetry is shown by figure 1. To the fact that the electrons move very slowly in the range of reflecting electrodes, the high degree of sensitivity of this method is ascribed, because the electric and magnetic microfields are very weak. Figures 2-5 show examples of micropictures, viz. first ordinary structural pictures compared with electron-optical images of the domains, and further, pictures taken in various magnetic fields are compared. The investigation of the structure of the domain in ferromagnetics is finally dealt with and is supplemented with examples. Finally, further development was investigated and found to be promising. There are 9 figures and 7 references, 3 of which are Soviet.

ASSOCIATION: Fizicheskiy fakultet Moskovskogo gos. universiteta im. M. V. Lomonosova (Physical Department of the Moscow State University imeni M. V. Lomonosov)

Card 2/2

AUTHORS:

Dubinina, Ye. M., Spivak, G. I.,  
Pryamkova, I. A.

SGV/48-23-6-23/28

TITLE:

The Obtaining of Images in the Pulse Principle in the  
Emission Microscope With High Resolving Power (O poluchenii  
izobrazheniy v impul'snom rezhime v emissionnom mikroskope  
vysokogo razresheniya)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959,  
Vol 23, Nr 6, pp 762-764 (USSR)

ABSTRACT:

In the introduction to this paper it is shown that by investigating pulsed emission in an emission microscope, it is possible to investigate the conditions on active cathodes in pulsed operation. Images of the emitting cathode in normal operation are compared with those in pulsed operation. The impulse increase exercises considerable influence upon resolving power. The work described was carried out by means of the industrial electrostatic microscope ESM-50, which has an immersion object with 150-fold enlargement. The block scheme of the current supply of the instrument is shown (Fig 1) and discussed. As examples, two pictures (Fig 2) of the cathode in steady and in pulsed operation are shown; the pictures were

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The Obtaining of Images in the Pulse Principle                    SOV/48-23-6-23/28  
in the Emission Microscope With High Resolving Power

not found to differ. A further investigation carried out on an L-cathode also showed no essential differences. Finally, the possibility of using pulsed operation when investigating the domain structure in ferromagnetics and ferroelectrics is shown and a stroboscopic arrangement is described by means of which images of the domain structure with higher resolving power were attained. There are 3 figures and 3 Soviet references.

ASSOCIATION: Fizicheskiy fakul'tet Moskovskogo gos. universitet im. M. V. Lomonosova (Physics Department of Moscow State University imeni M. V. Lomonosov)

Card 2/2

PHASE I BOOK EXPLOITATION

SOV/5526

Vsesoyuznoye soveshchaniye po magnitnoy strukture ferromagnetikov,  
Krasnoyarsk, 1958.

Magnitnaya struktura ferromagnetikov: materialy Vsesoyuznogo  
soveshchaniya, 10 - 16 iyunya 1958 g., Krasnoyarsk (Magnetic  
Structure of Ferromagnetic Substances; Materials of the All-Union  
Conference on the Magnetic Structure of Ferromagnetic Substances,  
Held in Krasnoyarsk 10 - 16 June, 1958) Novosibirsk, Izd-vo  
Sibirsckogo otd. AN SSSR, 1960. 249 p. Errata slip inserted.  
1,500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut fiziki Sibirsckogo  
otdeleniya. Komissiya po magnetizmu pri Institute fiziki metallov  
OEWN.

Resp. Ed.: L. V. Kirenskiy, Doctor of Physical and Mathematical  
Sciences; Ed.: R. L. Dudnik; Tech. Ed.: A. F. Mazurova.

PURPOSE: This collection of articles is intended for researchers in  
ferromagnetism and for metal scientists.

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Magnetic Structure (Cont.)

71  
SOV/3526

COVERAGE: The collection contains 38 scientific articles presented at the All-Union Conference on the Magnetic Structure of Ferromagnetic Substances, held in Krasnoyarsk in June 1958. The material contains data on the magnetic structure of ferromagnetic materials and on the dynamics of the structure in relation to magnetic field changes, elastic stresses, and temperature. According to the Foreword the study of ferromagnetic materials had a successful beginning in the Soviet Union in the 1930's, was subsequently discontinued for many years, and was resumed in the 1950's. No personalities are mentioned. References accompany individual articles.

TABLE OF CONTENTS:

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Shur, Ya. S. [Institut fiziki metallov AN SSSR - Institute of Physics of Metals, AS USSR, Sverdlovsk]. On the Magnetic Structure of Ferromagnetic Substances	5
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Magnetic Structure (Cont.)	SOV/5526
on the Magnetic Properties of Ferrites	175
Dekhtyar, M. V., and N. W. Kazantseva [Physics Department of the Moscow State University]. Anomalous Temperature Dependence and Irreversible Changes in the Magnetic Properties of Alloy Ni - Fe (50% Ni)	177
Spivak, G. V., and I. A. Pryamikova [Physics Department of the Moscow State University]. Development of the Electron-Mirror Method for the Visual Observation of the Domain Structure of Ferromagnetic Substances	185
Spivak, G. V., Ye. I. Shishkina, and V. Ye. Yurasova [Physics Department of the Moscow State University]. Concerning One Method for the Detection of Magnetic Inhomogeneities	191
Drokin, A. I., D. A. Laptev, and R. P. Smolin [Institute of Physics, Siberian Branch AS USSR, Krasnoyarsk]. Thermo-magnetic Hysteresis of Ferromagnetic Substances at the Points	

Card 9/11

15-1957-10-14013

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 10,  
p 98 (USSR)

AUTHORS: Zykov, Ye. A., Pryamonosov, P. S.

TITLE: Minerals of Gold and Tellurium and the Paragenetic Asso-  
ciations of a Deposit in the Southern Altay (Mineraly  
zolota, tellura i parageneticheskiye assotsiatsii odnogo  
iz mestorozhdeniy Yuzhnogo Altaya)

PERIODICAL: Nauchn. raboty stud. Sverdl. gorn. in-ta, 1957, Nr 3,  
pp 5-14

ABSTRACT: The gold quartz veins of this deposit are confined to  
small granite stocks. The vein minerals are quartz,  
ankerite, sericite, chlorite, albite, tourmaline, and  
calcite. The ore minerals are pyrite, chalcopyrite,  
tetrahedrite, galena, scheelite, native gold, nagyagite,  
altaite, calaverite, tetradiomite, krennerite, native  
tellurium, rickardite, tellurobismuthinite, azurite,  
anglesite, cerussite, hydrotelluride, and native copper.  
A list is given of the paragenetic associations in their

Card 1/2

15-1957-10-14013

Minerals of Gold and Tellurium and the Paragenetic Associations of a  
Deposit in the Southern Altay

age sequences: 1) carbonate-sericite-pyrite association; 2)  
quartz-scheelite; 3) quartz-pyrite; 4) lead-sulfur-telluride;  
and 5) calcite. A brief description of these minerals is given.

Card 2/2

Ye. S. Kabanova

PRYAMIKOVA, N.A., kandidat biologicheskikh nauk.

Description of the first-stage larvae of some species of the genus  
Mylabris F. Trudy Resp.sta.zashch.rast.2:174-193 '55. (MIRA 10:1)  
(Balkhashskii District--Blister beetles) (Larvae)

PRYAMKOVA, M.A.

Studying the pests of Anabasis ap'ylla l. Trudy Alma-At.bot.sada  
3:92-94 '56. (MLRA 10:3)  
(Arys' District--Anabasis--Diseases and pests)  
(Insects, Injurious and beneficial)

PRYAMISL'ENKOVA, N. A.

✓ 1084. Lag-phase and oxidation-reduction potential in cultures of anaerobes. I. L. Rabotnova and N. A. Priamishnikova. *Mikrobiologiya*, 1955, 24, 671-676; *Referat. Zn. biol. Khim.*, 1966, Abstr. No. 14559. — The lag-phase in developed cultures of the obligate anaerobes *Clostridium sporogenes* and *C. acetoaceticum* and of the facultative anaerobe *C. acetoethylicus* can be cut short by the addition of reducing agents (hydrosulphite, ascorbic acid) and prolonged by adding oxidising agents. (Russian).

C. C. BARNARD

2  
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GINZBURG-KALININA, S.I.; TIMEN, Ya.Ye.; TENDETNIK, Yu.Ya.; PRYAMUKHINA, N.S.; VAKARINA, Ye.F.

Formation of immunological reactions in experimental typhoid fever carrier state in rabbits. Zhur. mikrobiol., epid. i immun. 40 no. 8: 14-19 Ag '63. (MIRA 17:9)

1. Iz Moskovskogo instituta vaktsin i syvorotok imeni Mechnikova.

L 1396-66 EFT(1)/EWA(j)/EWA(b)-2 BW  
ACCESSION NR: AP5017436

UR/0248/65/000/007/0061/0066

616.927.7-092.9

AUTHOR: Rukhadze, E. Z.; Pryamukhina, N. S.; Didukh, M. S.

6,53'

35  
31  
B

TITLE: Reproducing an experimental paratyphoid (Brøslau) bacteria carrier state in rabbits

SOURCE: AMN SSSR. Vestnik, no. 7, 1965, 61-66

TOPIC TAGS: experiment animal, intestinal disease, bacterial disease, bacteria, blood, morphology

ABSTRACT: In a series of experiments chinchilla rabbits (1.5-2 kg) were infected perorally with S. typhimurium (2.5-9 bacteria/kg dose) administered together with milk (1 ml) to induce a paratyphoid bacteria carrier state. Bacteriological, immunological, serological, and morphological indices were determined to confirm the presence of paratyphoid. In experimental animals the infectious process was characterized by fever and weight loss and in some cases anorexia and diarrhea developed. Starting with the 10th to 14th days the O- and H-agglutinin titers rose significantly. The causative agent was found in animal feces and in organs of killed animals. Morphological

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L 1396-66  
ACCESSION NR: AP5017436

investigations revealed specific changes characterized by hyperplasia and necrosis of lymphoid tissue (Peyer's patches) and necrotic foci in the liver and kidneys. These various indices demonstrate that a paratyphoid carrier state can be successfully induced in animals.  
Orig. art. has: 1 figure and 1 table.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut epidemiologii Ministerstva zdravokhraneniya SSSR, Moscow (Central Scientific-Research Institute of Epidemiology of the Ministry of Health, SSSR)<sup>66</sup> Moskovskiy nauchno-issledovatel'skiy institut vaktsin i syvorotok im. I. I. Mechnikova Ministerstva zdravookhraneniya SSSR (Moscow Scientific-Research Institute of Vaccines and Serums of the Ministry of Health, SSSR)<sup>66</sup>

SUBMITTED: 21Apr65 ENCL: 00

SUB CODE: LS

NR REF Sov: 000

OTHER: 000

Card 2/2

RUKHAIEZE, I. Z.; PRYAMUKHINA, N.S.; KARTASHEVA, V.N.

Asymptomatic Salmonella infection in white laboratory rats. Zdrav.  
mikrobiol., epid. i immun. 40 no.12:119-120 D '63. (MIRA 17/12)

1. Iz Moskovskogo instituta vaktsin i sывороток имени Мечникова.

YILMAZ, A.

M.D., Sarikliy St. cu University - 1947

"Influence of Photosynthesis on the Oxidation-Reduction Systems of the Cells of Leaf Filters," Dok. AN, 58, No. 7, 1947

PRYANICHNIKOV, L.K.; KARAVAYEV, N.I., instruktor

Fan clamp. Transp. stroi. 12 no.8:52-53 Ag '62. (MIRA 15:9)

1. Zamestitel' nachal'nika Tashkentskoy normativno-issledo-  
vatel'skoy stantsii Orgtransstroya (for Pryanichnikov).  
(Gluing—Equipment and supplies)

PRYANICHNIKOV, L.K.

Machine for cutting wire bundles in reinforced concrete  
crossties. Transp. stroi. 11 no.8:48 Ag '61. (MIRA 14:9)

1. Zamestitel' nachal'nika Tashkentskoy normativno-issledovatel'skoy stantsii Orgtransstroya.  
(Metal-cutting tools) (Concrete reinforcement)  
(Railroads--Ties)

PRYANICHNIKOV, L.K.

Machine tool for the manufacture of insertion pieces for wall  
panels. Transp. stroi. 12 no.6:53 Je '62. (MIRA 15:6)

1. Zamestitel' nachal'nika Tashkentskoy normativno-issledovatel'skoy  
stantsii Orgtransstroya.  
(Precast concrete)

PRYANICHNIKOV, N.

Pneumatic clamps for pipe-cutting machines. Mashinostroitel'  
no.10:34 '60. (MIRA 13:10)  
(Pipe cutting)

PRYANICHNIKOV, Ye.V.

Flowsheet for hydrocyclone operations providing for a constant  
pressure at its inlet. TSvet. met. 33 no.6:85-86 Je '60.  
(MIRA 14:4)

(Separators (Machines))

PRYANICHNIKOVA, N. T.

Dissertation: "Tissue Therapy for Diseases of the Auditory Nerve, Otosclerosis, Atrophic Rhinopharyngitis, and Ozena." Cand Med Sci, First Moscow Order of Lenin Medical Inst, 23 Jun 54. (Vechernaya Moskva, Moscow 14 Jun 54)

SO: SUM 316, 23 Dec 1954

FRYANIK, P.K. (Krivoy Rog)

Study of the compaction of foundation beds by heavy tampers.  
Osn., fund. i mekh. grun. 6 [i.e.7] no.2:6-8 '65.  
(MIRA 18:8)

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CIA-RDP86-00513R001343420012-1

PRYANIK, P.K.; PIKUNOV, A.P.

Brile foundations on settling sciles. Sbor, nach. strud. KGB  
(MIRA 17:5)  
12-16-21 '62.

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343420012-1"

PRIYANTKOV, V.I.

Tensile testing machine. Zav. lab. 30 no.11:1396-1397 '64  
(MIRA 18:1)

i. Moskovskiy nasosnyy zavod im. M.I. Kalinina.

KANYGIN, V.G.; PRYANIKOV, V.I.; URZHUMOV, S.V.

Hydraulic trough unit for the granulation of blast furnace slags  
at the Karaganda Metallurgical Plant. Stal' 24 no.2:188-191 F '64.  
(MIRA 17:9)

ALIYEV, Z.E.; AKHMFIZADE, A.A.; PRYANIKOV, Ye.I.; AGAMIRZOV, N.A.;  
KAGRAMANOVA, F.A.; SHTEFYNSHNAYEVR, Ye.M.

Increasing the yield of oil, using a dewaxing installation.  
Sbotr. nauch.-tekhn. inform. Azerb. inst. nauch.-tekhn. inform.  
Ser. Neftseper. i khim. prom. no.2-14-20 '62.

(MIRA 18:9)

DZHUVARLY, Ch.N.; ALIYEV, Z.I.; KLIMOVA, N.V.; LOGINOVA, S.I.;  
MELIKOVA, T.A.; PRYANIKOV, Ye.I.; SAFONOV, V.A.

Sulfuric-acid refining of distillates of motor oil-10 separating  
acid oil from tar in an electrical field. Azerb. neft. khoz. 40  
no.9:36-38 S '61. (MIRA 15:1)  
(Lubrication and lubricants)

IVOLIN, Nikolay Mikhaylovich; PRYANIKOV, Ye.G., retsenzent; ALEKSEYEV,  
V.I., red.izd-va; RIDNAYA, I.V., tekhn. red.

[Experience in combining professions on Ob' River motorships]  
Opyt sovmeshcheniya professii na teplokhodakh Obi. Moskva,  
Izd-va "Rechnoi transport," 1962. 33 p. (MIRA 16:2)  
(Ob' River--Inland water transportation--Employees)

KRICHEVSKIY, I.R.; YEFREMOVA, G.D.; PRYANIKOVA, R.O.; SEREBRYAKOVA, A.V.

On a possible case of critical phenomena. Zhur.fiz.khim. 37  
no.8:1924-1925 Ag '63. (MIRA 16:9)

1. Gosudarstvennyy institut azotnoy promyshlennosti i produktov  
organicheskogo sinteza.  
(Critical point) (Phase rule and equilibrium)

YEFREMOVA, G.D.; SHCHERBAKOV, V.I.; PRYANIKOVA, R.O.

Phase and volume ratios in the system hexamethylenediamine -  
ammonia. Khim. prom. no.6:433-436 Je '63. (MIRA 16:8)

(Hexanediamine) (Ammonia)  
(Phase rule and equilibrium)

YEFREMOVA, G.D.; PRYANIKOVA, R.O. (Moskva)

Phase and volume relations in the system adiponitrile - ammonia.  
Zhur. fiz. khim. 38 no.3:686-691 Mr '64. (MIRA 17:7)

1. Institut gosudarstvennykh nauchno-tekhnicheskikh i proektov organicheskogo  
sinteza.

YEFREMOVA, G.D.; PRYANIKOVA, R.O.

Equilibrium liquid - liquid in the system acetic acid - water -  
butane. Khim. prom. no.8:564-566 Ag '61. (MIRA 14:8)  
(Acetic acid) (Butane) (Phase rule and equilibrium)

KRICHEN'Y, I.R.; YEFIMOV, G.D.; PRYANIKOV, R.C.; POLYANOV, Ye.V.

Phase and volume relationships in the system acetic acid-  
butane. Khim. zhurn. vol. 37:43-49. 1961. (MIRA 14-7)

(Acetic acid)

(Butane)

KRICHEVSKIY, I.R.; TIFENICOVA, G.D.; PRIYANIKOVA, R.O.; SREBRYAKOVA, A.V.

Possible appearance of critical phenomena in three coexisting phases  
of a three-component system. Ukr. fiz. zhur. 9 no.5:481-486 My '64.  
(ERIA 17:9)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut  
azotnoy promyshlennosti i produktov organicheeskogo sinteza, Moskva.

YFPIKOV, V. P. I. KARPOVA, R. O.

mass and volume correlations in the system adipodinitrile - hexamethylenediamine - ammonia. Zhur. fiz. khim. 39 no.2; 1968-1943 Ag '65. (MIRA 18:9)

I. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti i produktov organicheskogo sinteza.

BERESTNEV, V.A.; DUBOVA, L.S.; PRYANIKOVA, T.S.; FEDIN, L.A.

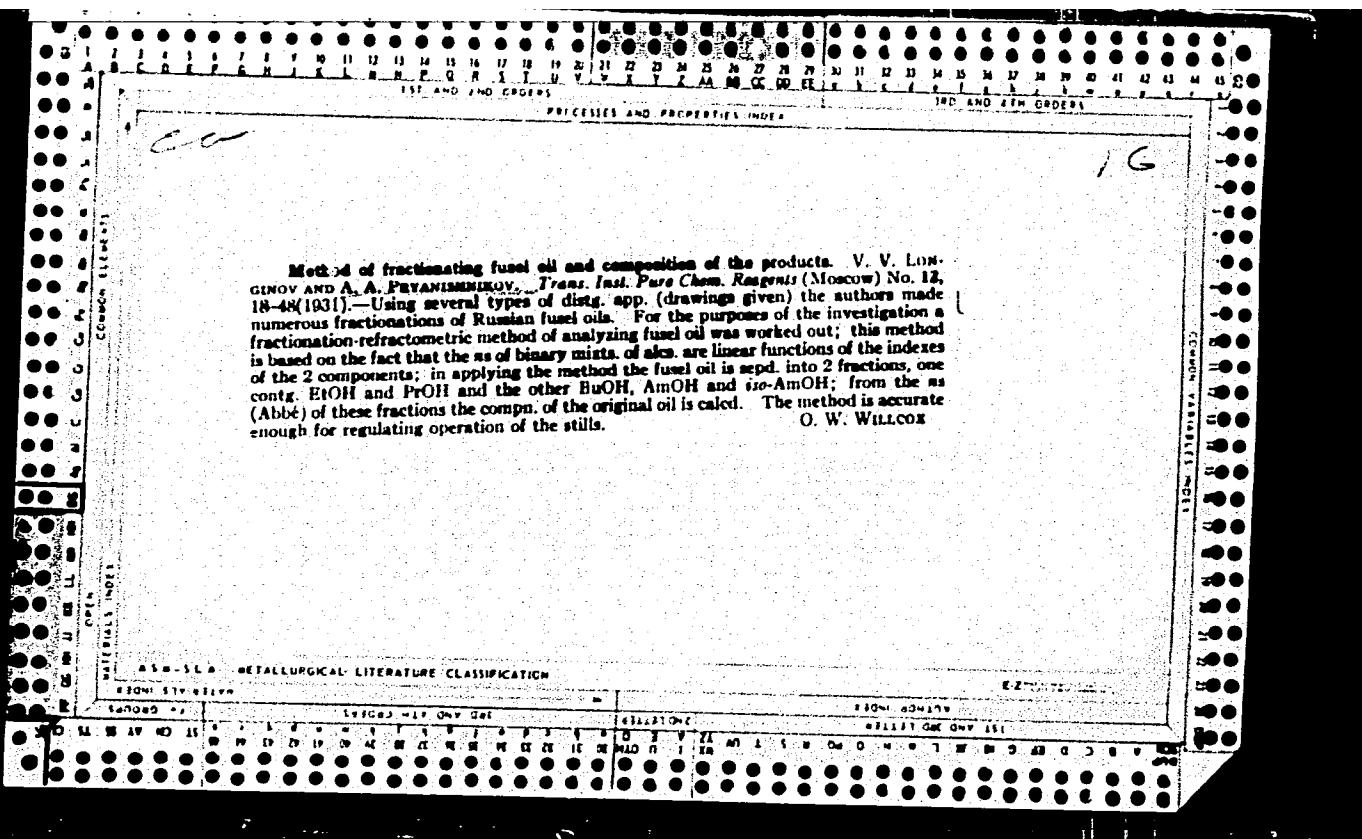
Inhomogeneity of oriented fibers. Vysokom. soed. 6 no.7±1302-  
1307 Jl '64 (MIRA 18±2)

1. Nauchno-issledovatel'skiy institut shinoj promyslennosti.

PRYANISHAMNIKOV, D. N.

4637. Agrokhimiya. (Dlya rasteniyevodcheskikh fak. s-kh. vuzov). Kiyev,  
Gossel'khozizdat USSR, 1954. 608 s s. kl. 27 sm. 7.000 ekz. 16 r. 20 k.  
V per. - Na Ukr. yaz. - (54-58305) 631.41 • 631.8

SO: Letopis' Zhurnal'nykh Statey, Vol. 7, 1949

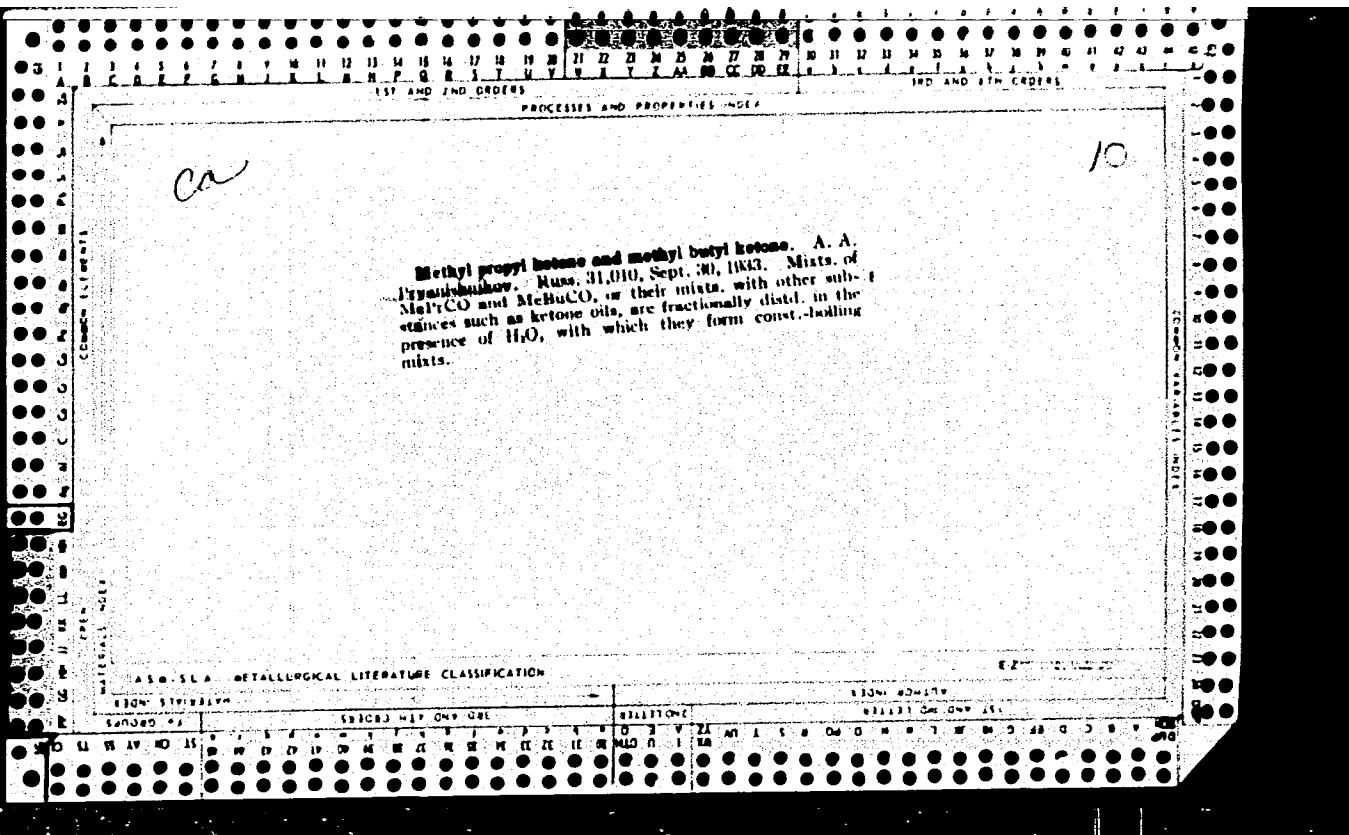


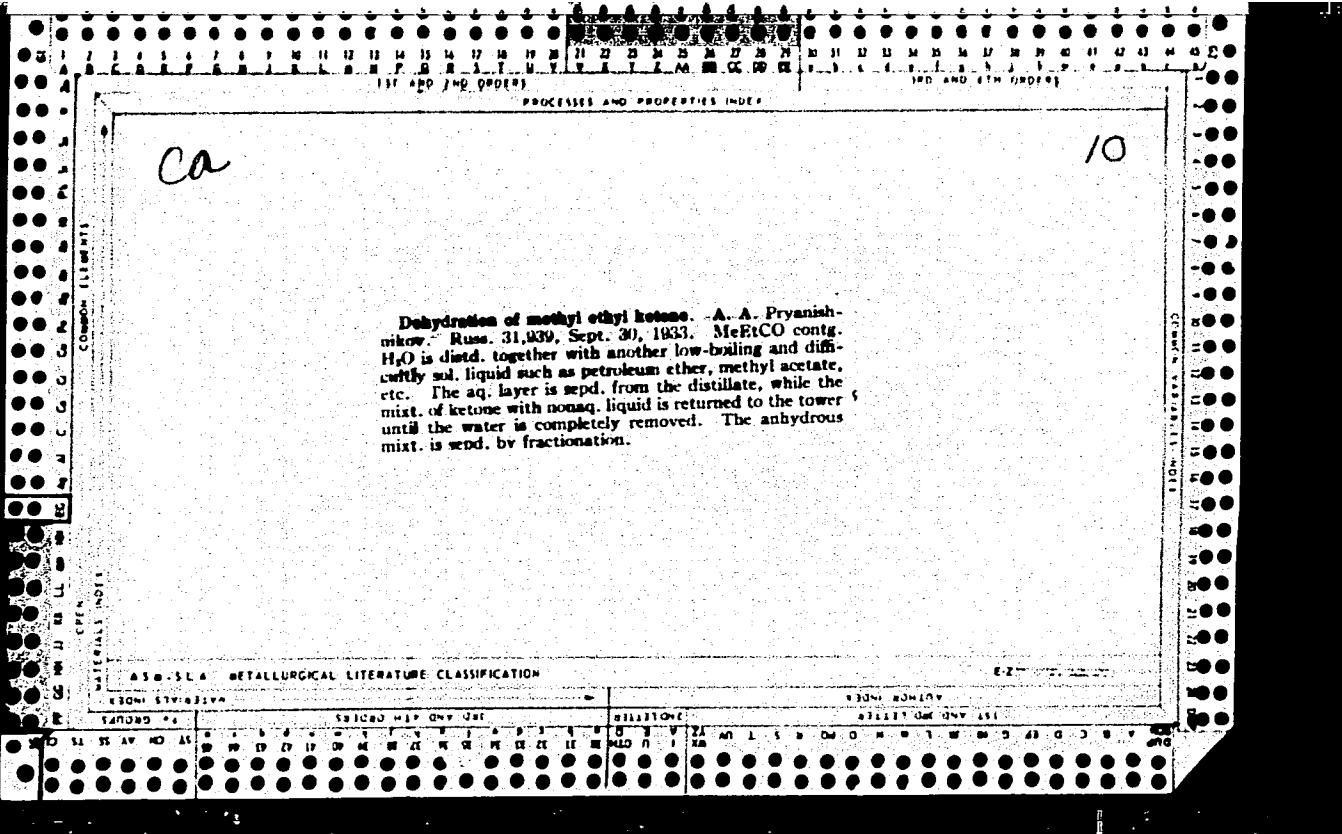
**Preparation of high-standard formic acid.** A. A. PAVANIKHINOV AND Z. I. SHAKHOVA. *J. Gen. Chem. (U. S. S. R.)*, 2, 821-5 (1932).—In a comparative exptl investigation of the existing methods for the prepn. of anhyd.  $\text{HCO}_2\text{H}$  (I) the best results were obtained by modification of the method of Brit. pat. 308,731. Thus produced, I was converted to high-standard I. Tech. 80% I with 3 parts  $(\text{CaH}_2\text{CO})_2$  was then brought to a boil, the exothermic reaction was allowed to subside, the mixt. was then heated 2 hrs. and let stand overnight and the anhyd. I distilled off with a yield of 76-100%.  $d_{4}^{20}$  1.2273,  $d_{4}^{25}$  1.2198, f. p. 8.05°; this subjected to fractional freezing, produced liquid and solid high-standard I with closely related f. p., b.p. 100.8°,  $b_{4}^{20}$  99.8°,  $d_{4}^{20}$  1.22031, m. 8.40°, the corresponding constants, by Timmermann (*Tear. bureau chim. et chim. physicochim.*, 6) 100.7°,  $b_{4}^{20}$  8.40°, 1.22020, 8.40°. **CLEAR BLANC**, a flavor physicochim. 6) 100.7°,  $b_{4}^{20}$  8.40°, 1.22020, 8.40°.

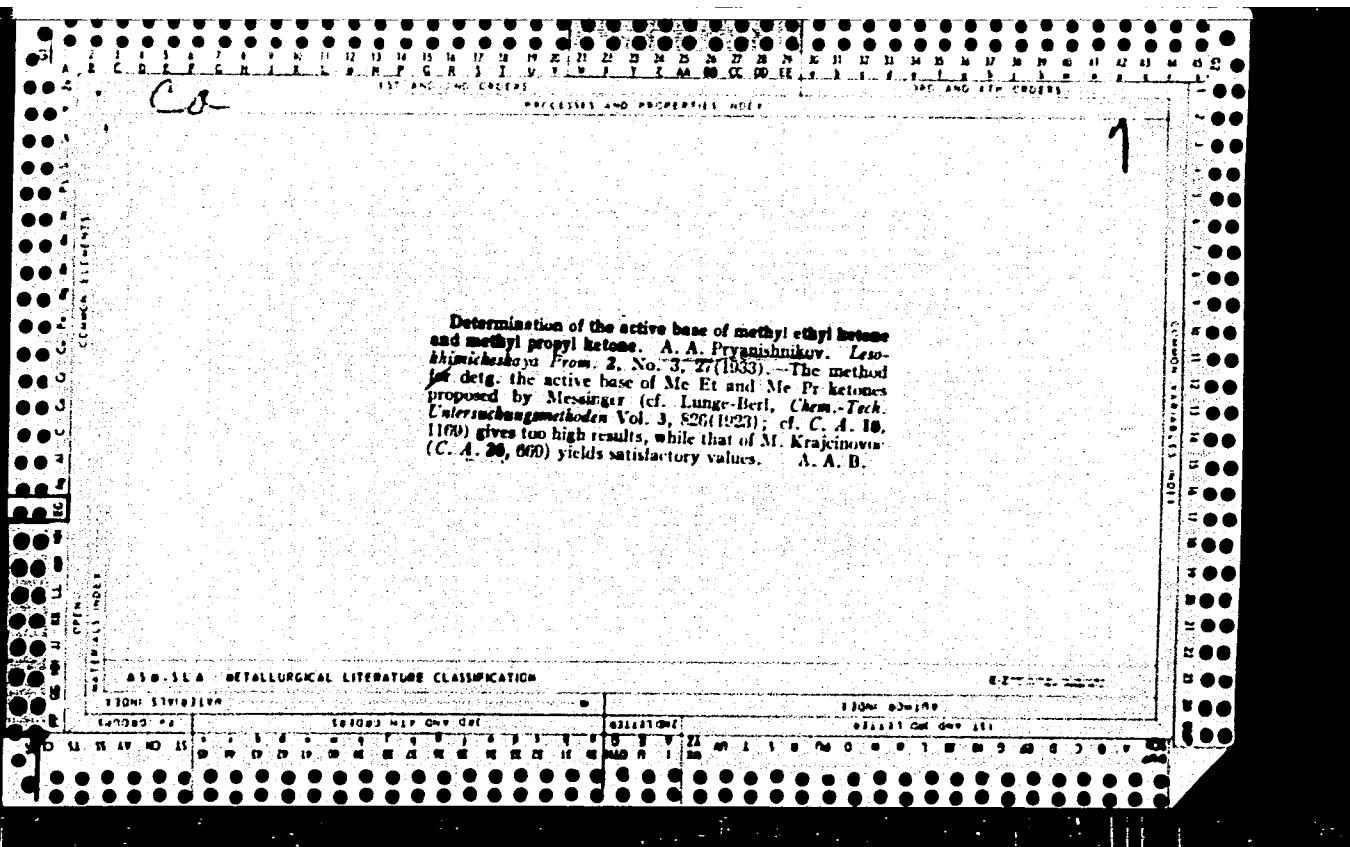
### **Chia Hsien**

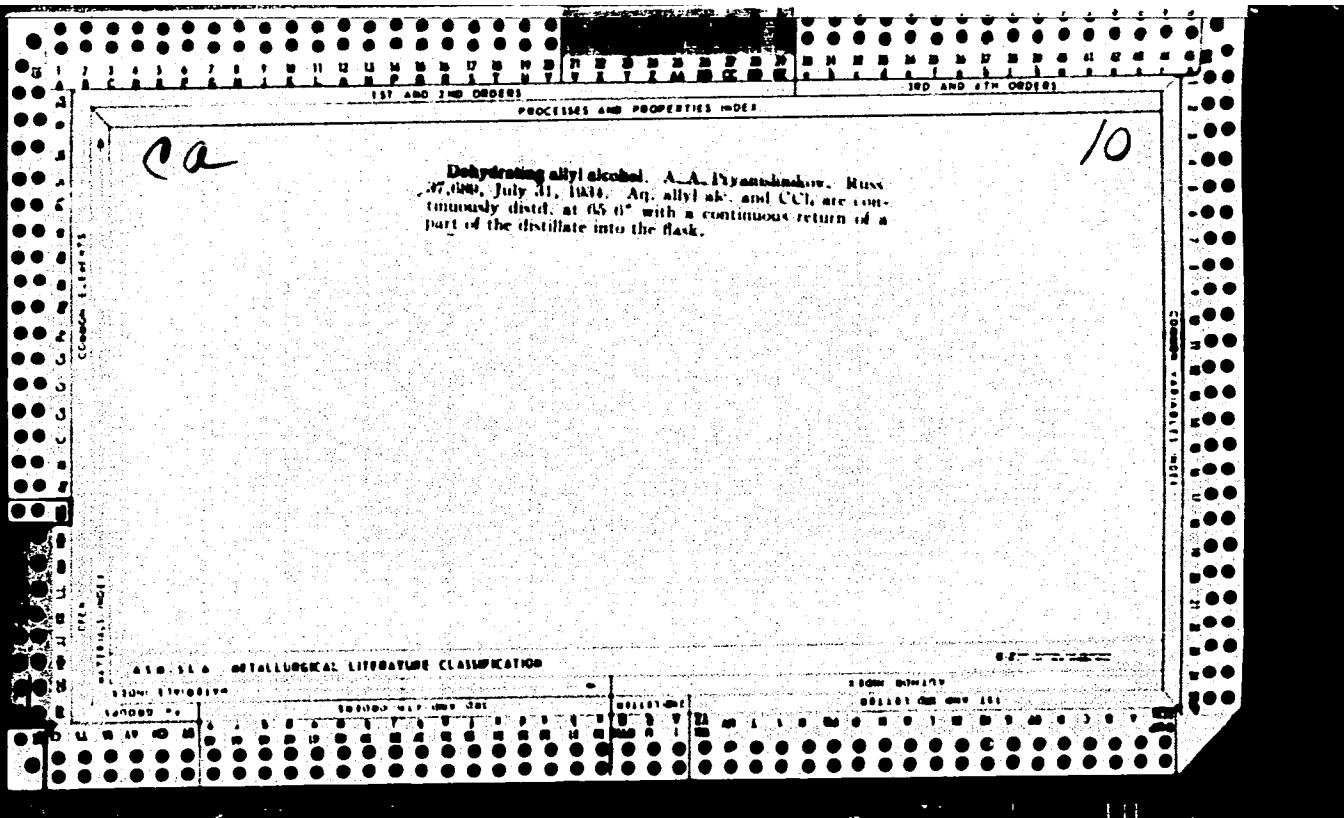
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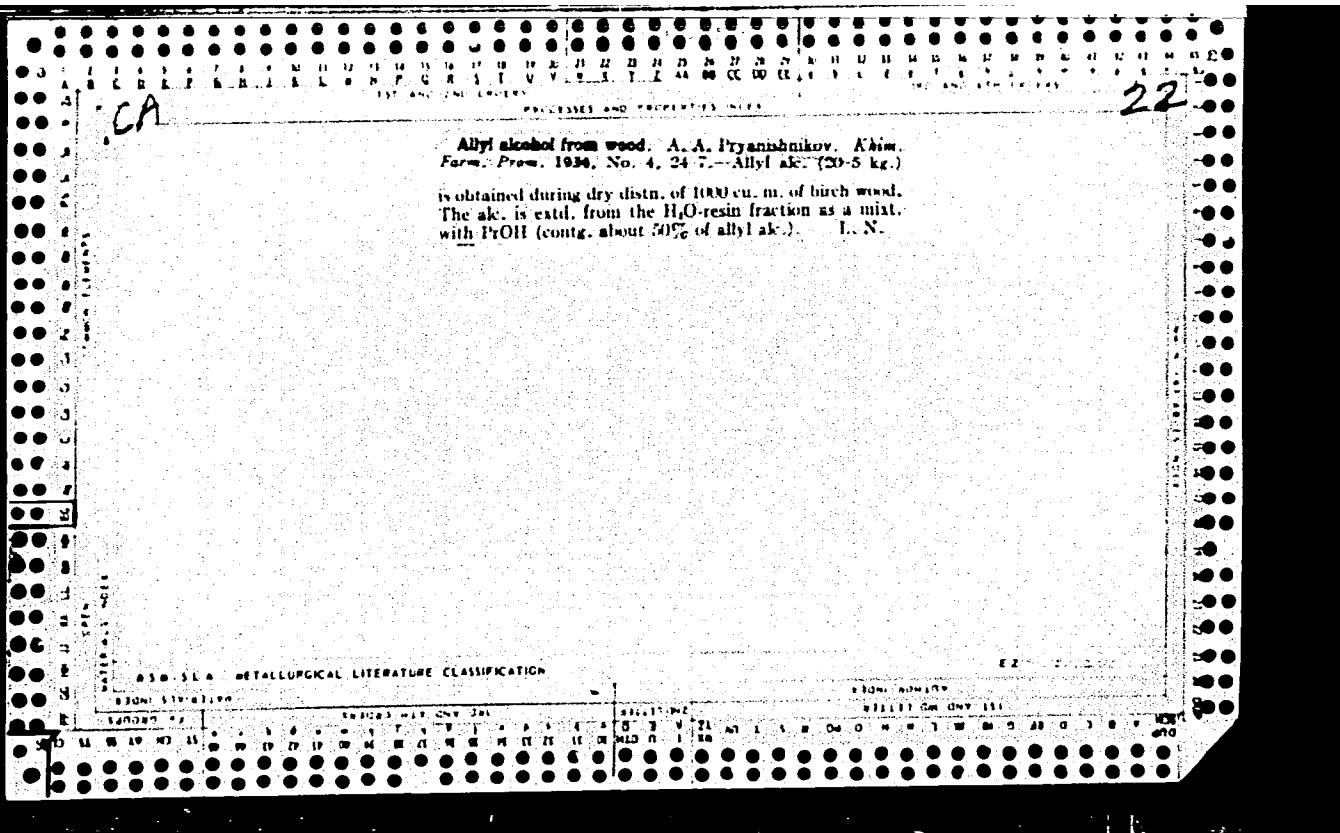
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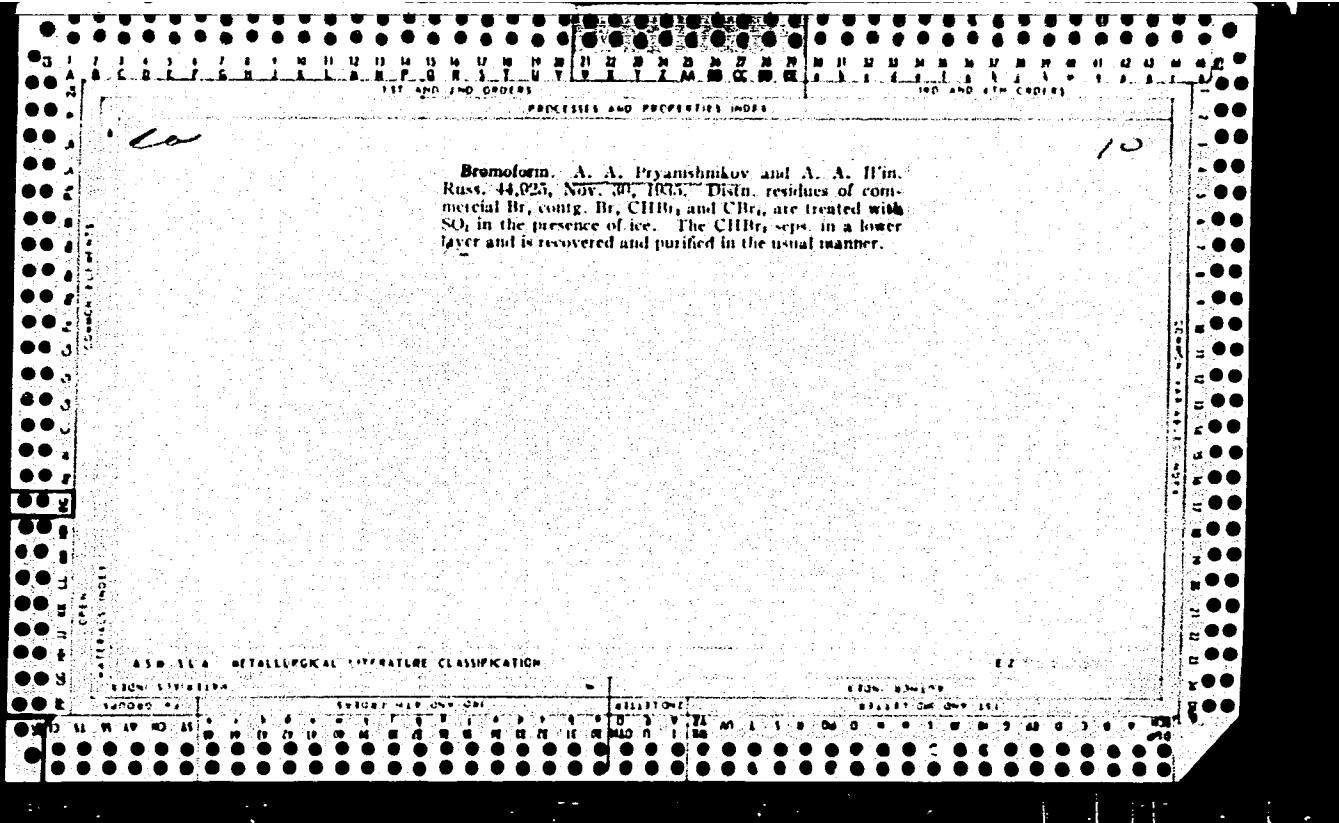








Separating saturated from unsaturated ketones. N. S. Vul'fson and A. A. Pryanishnikov. Russ. 43,422, June 30, 1935. The report is based on the more rapid interaction of satd. ketones with NaHSO<sub>3</sub> soln.



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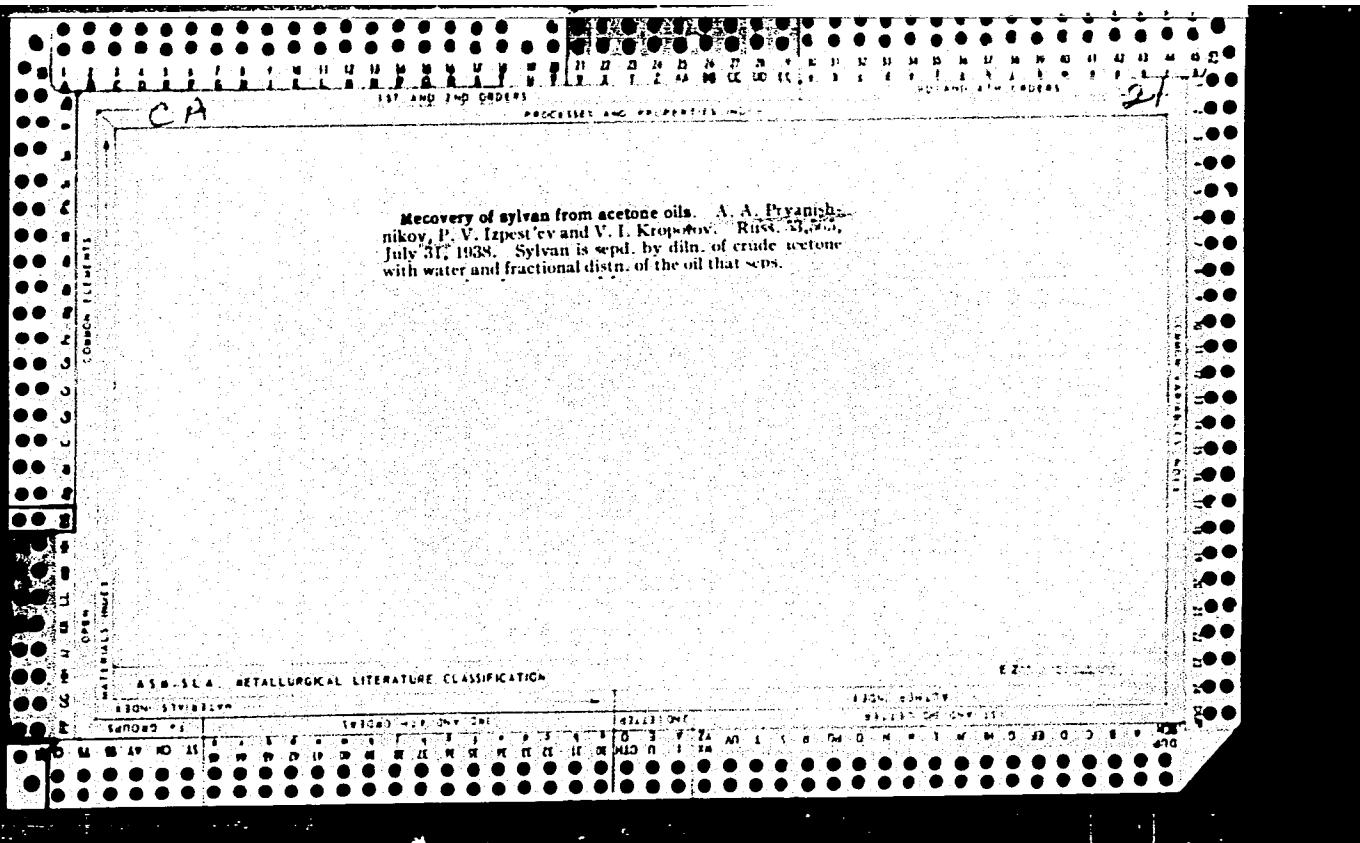
LIST AND END FORMS

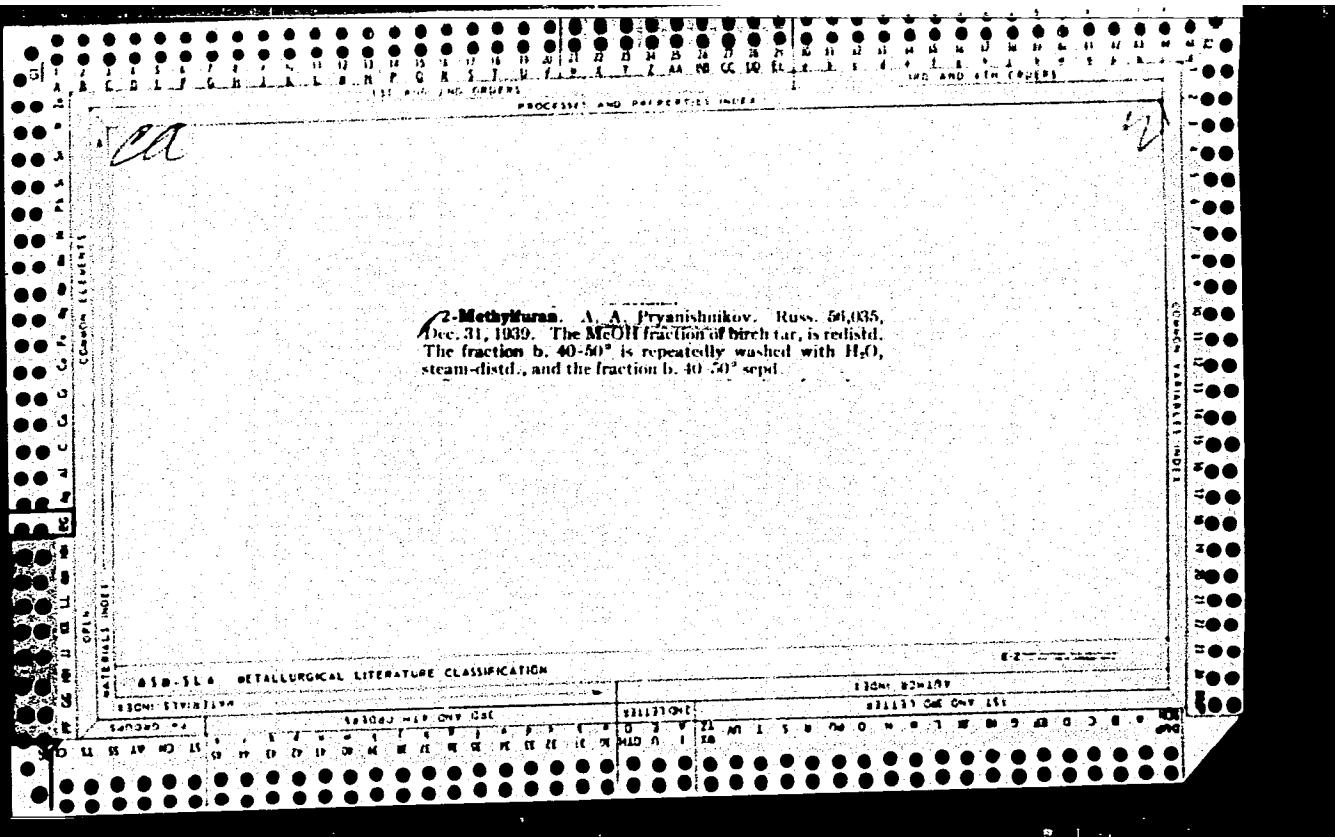
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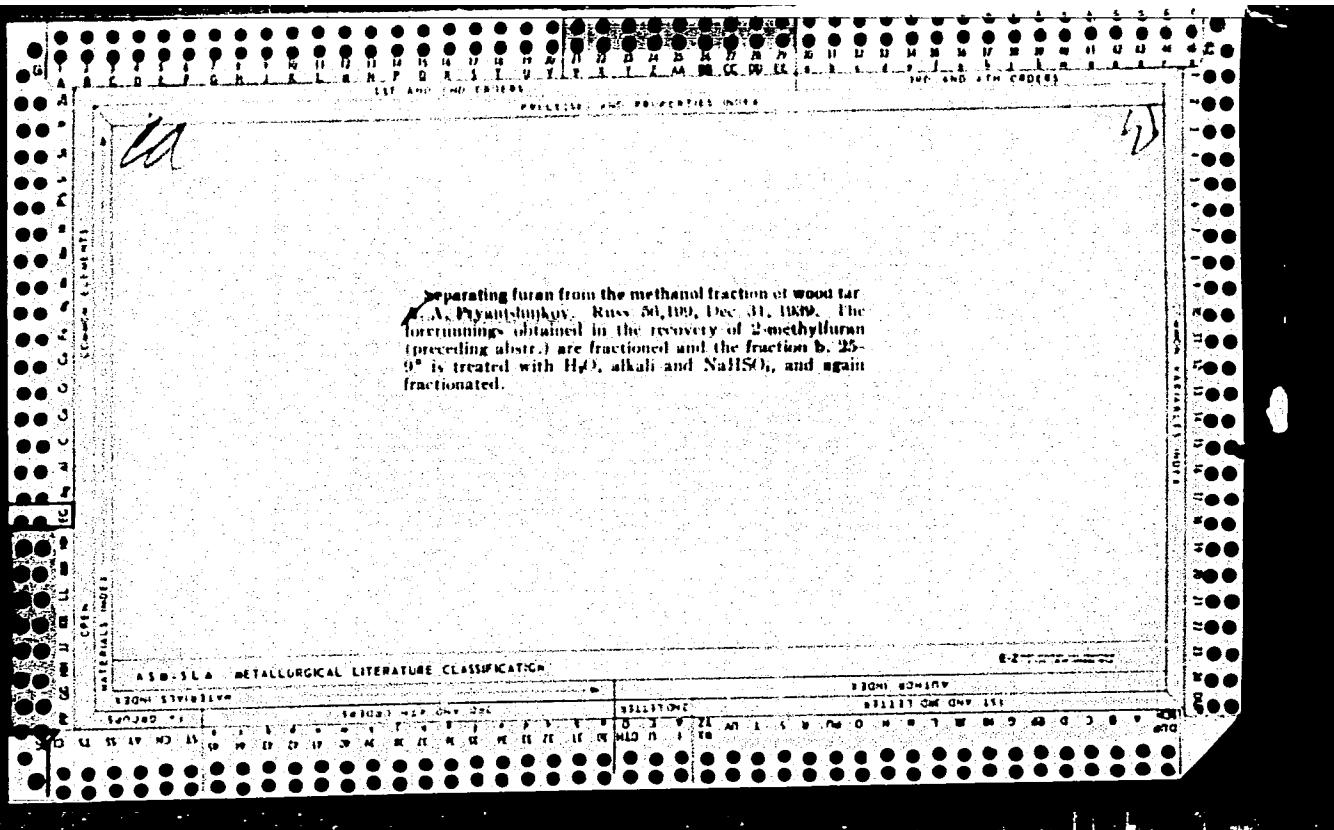
END AND LIST COLUMNS

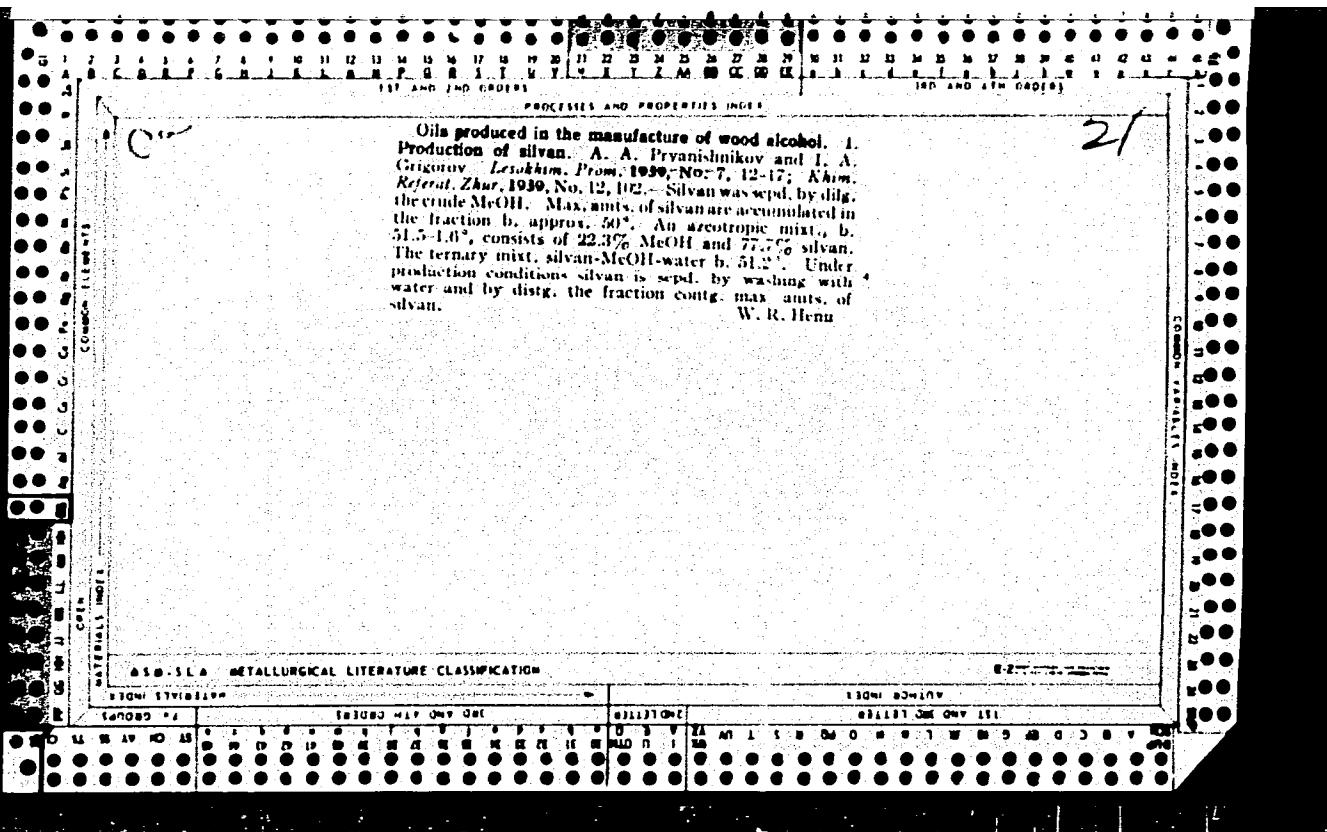
**Photographic desensitizers.** G. I. Mikhailov and A. A. Pryanishnikov. Russ. 32,722, Feb. 28, 1968. Substituted methylquinolinium methylsulfates are condensed with 3-nitrobenzaldehyde or its substituted derivs., in monohydric alc., as solvent; the water formed is distd. off as an azeotropic mixt. with the alc.

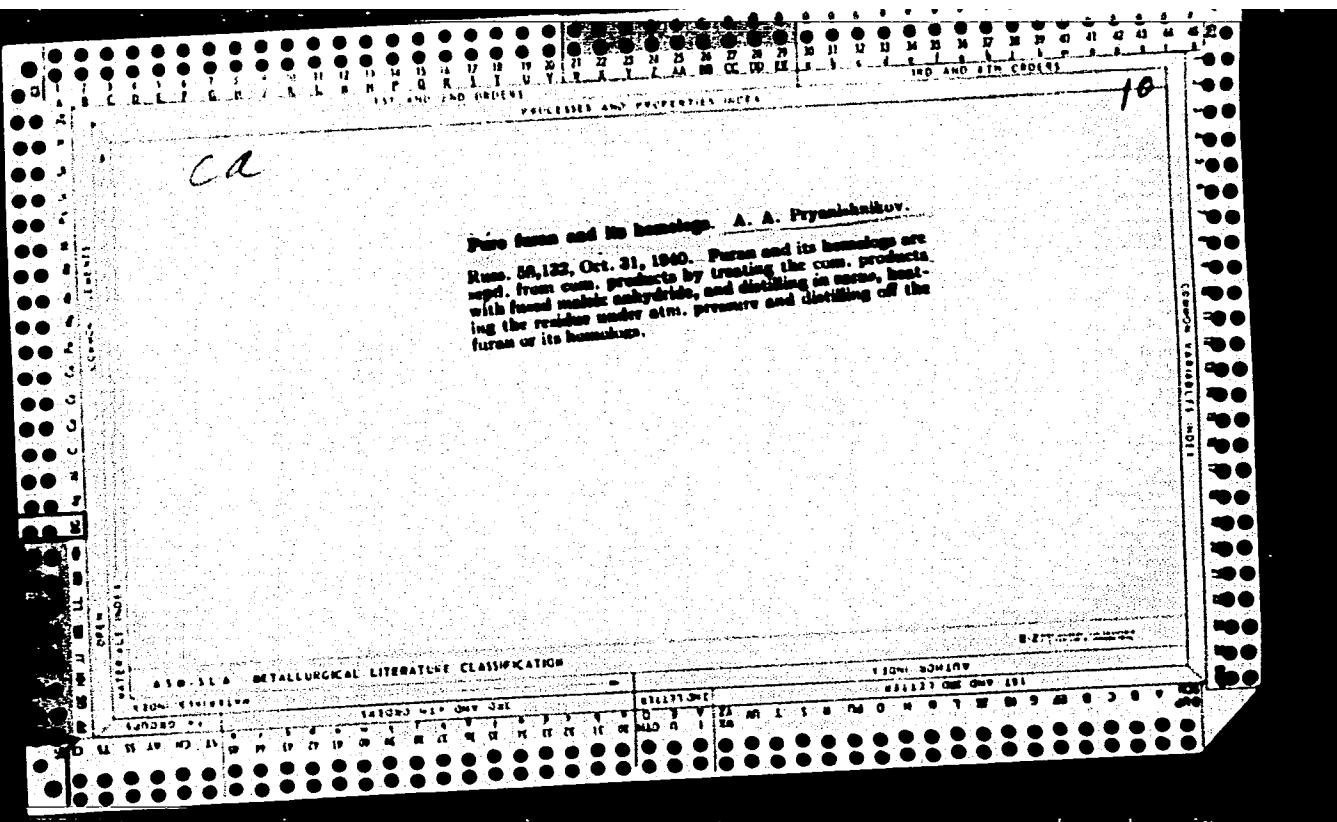
AMSLA METALLURGICAL LITERATURE CLASSIFICATION

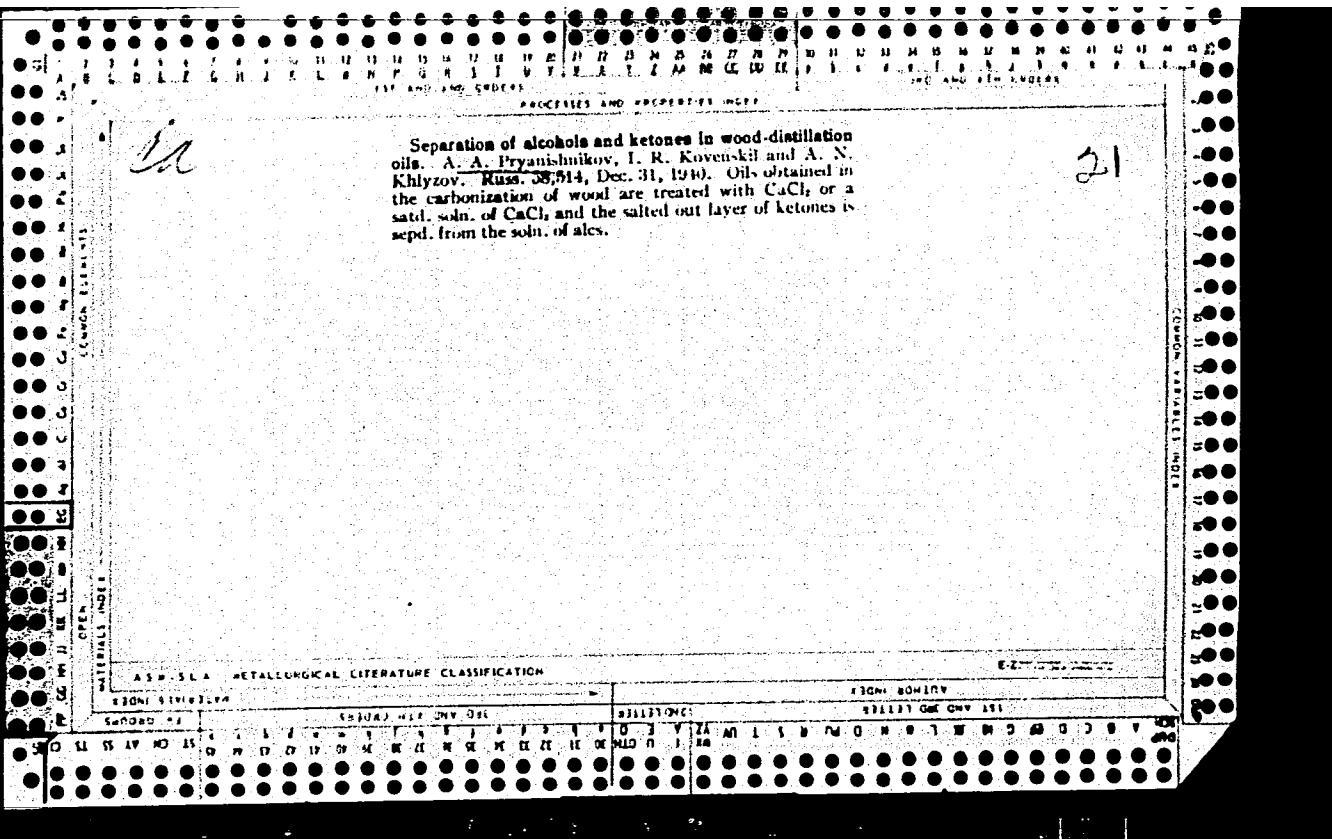


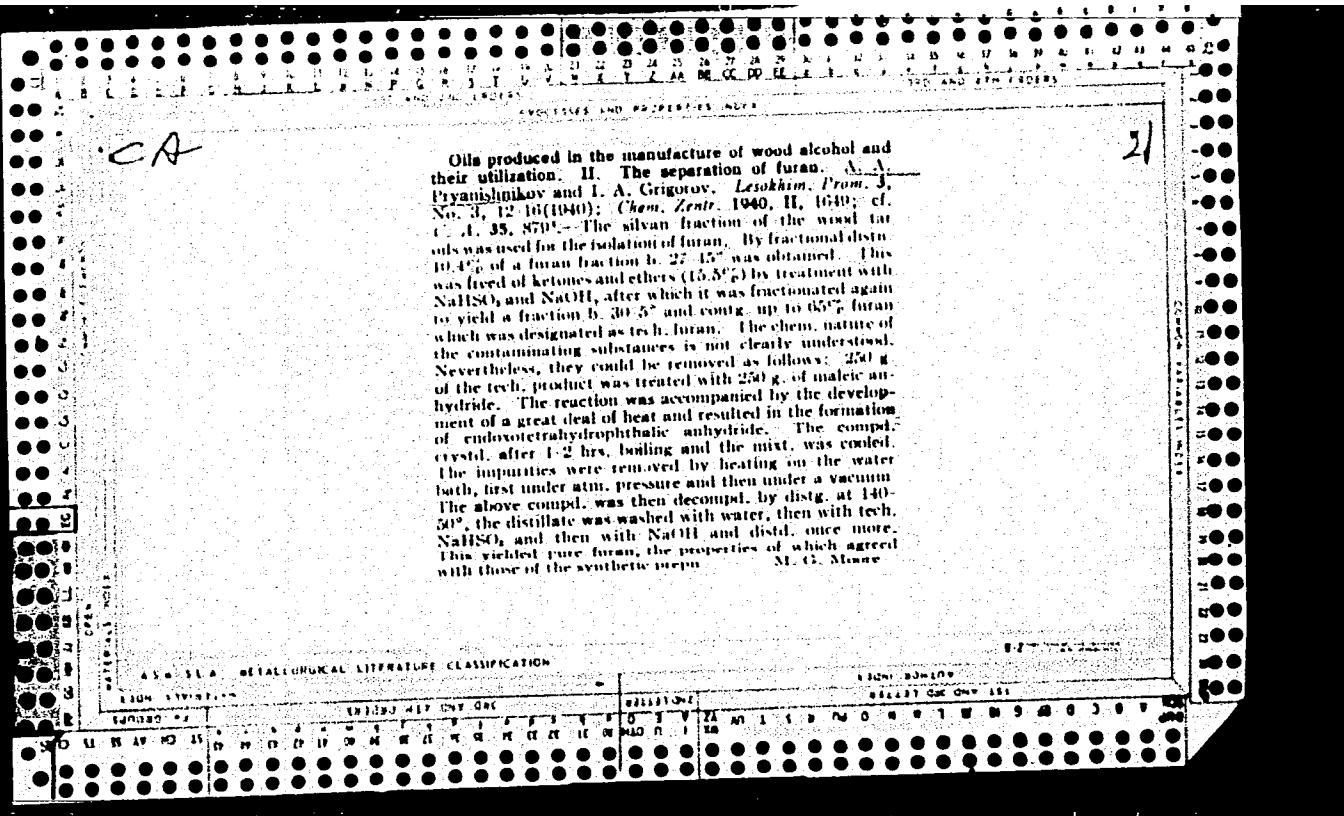


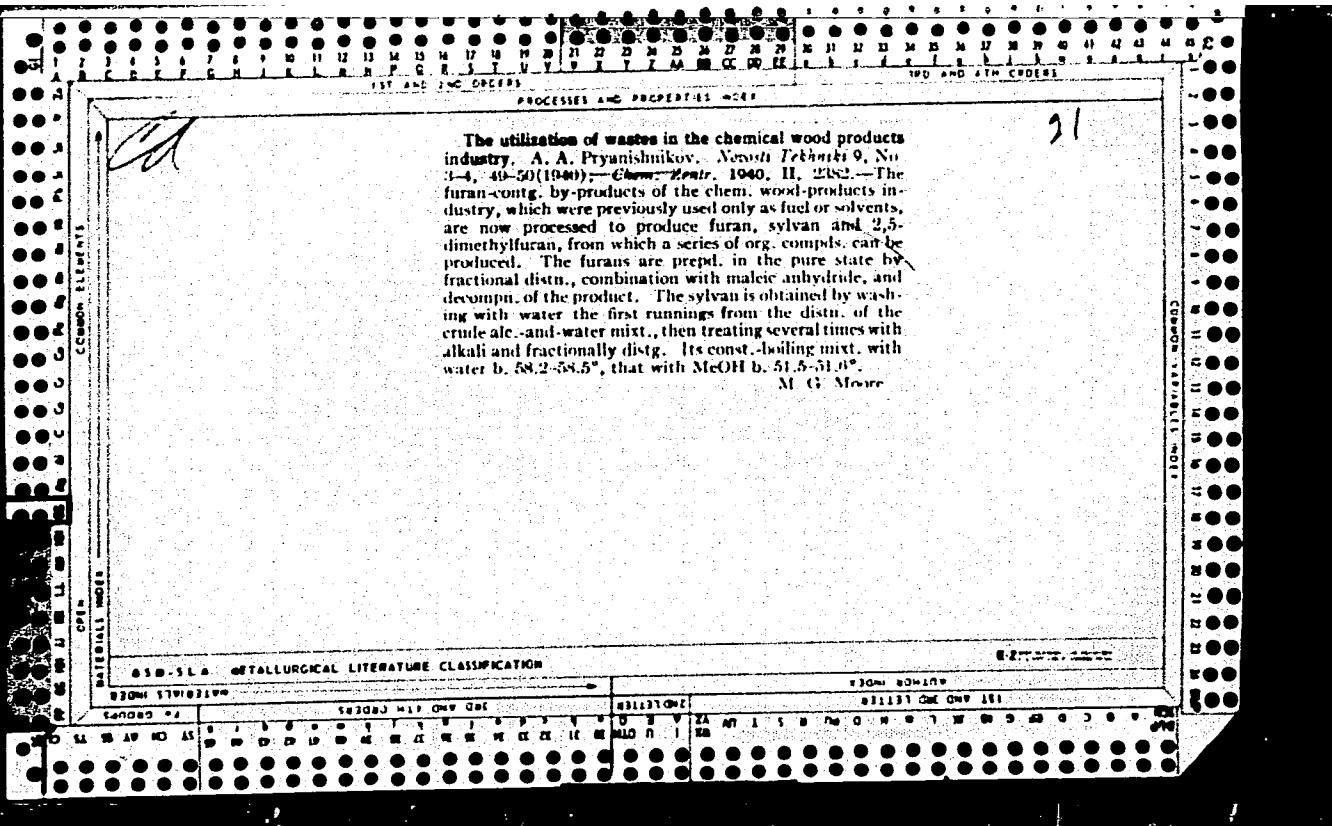


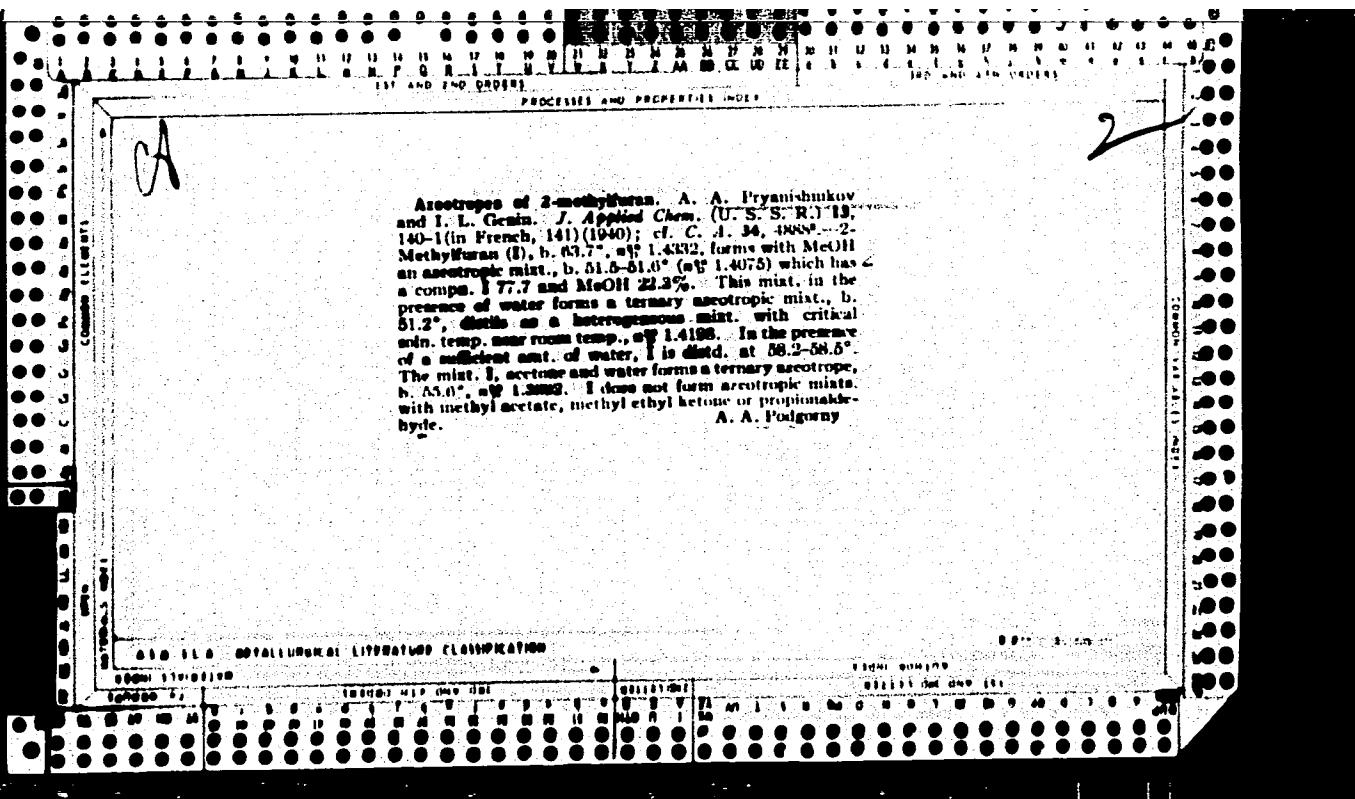


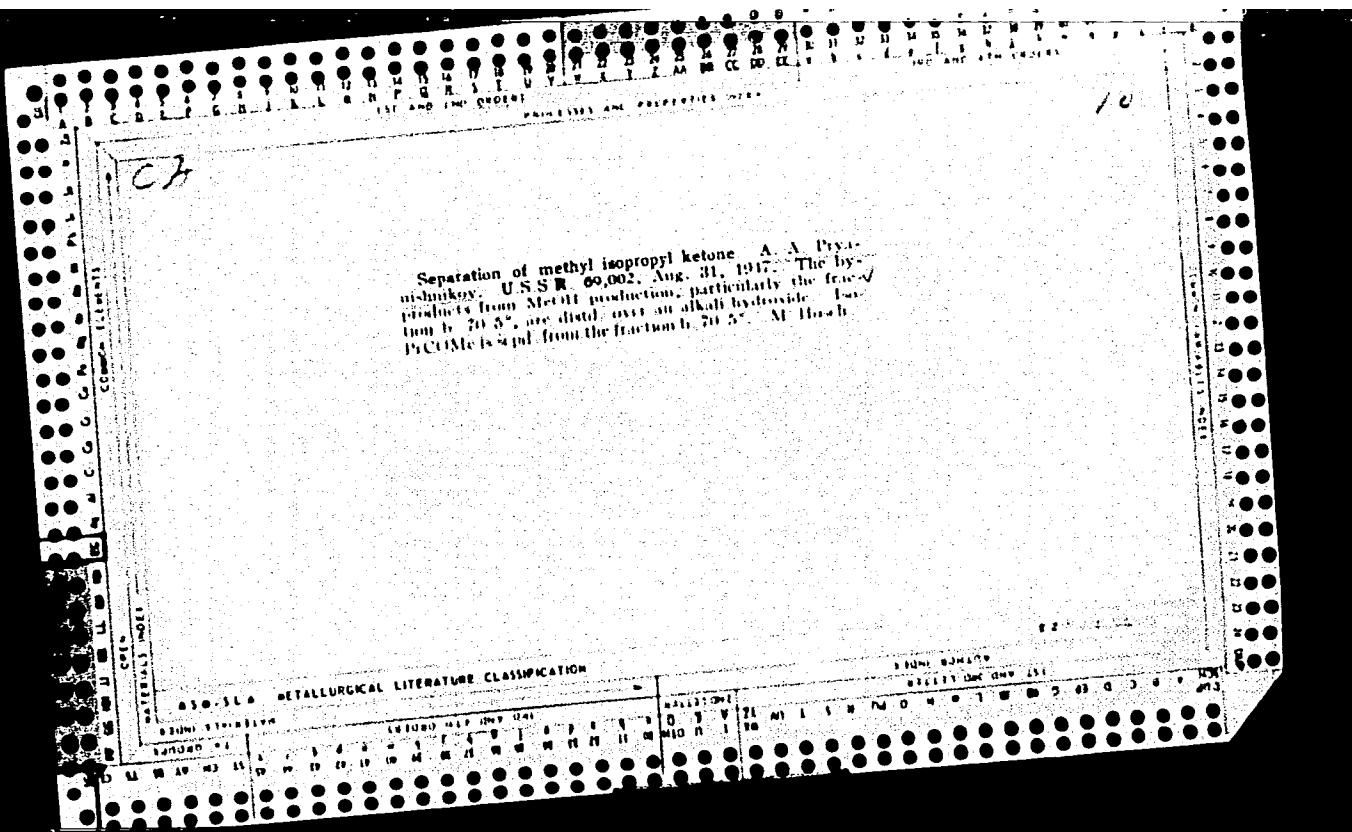












## PLEASE DO NOT EXPAND

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Soviet Institute po Ljuminescheskii, Bui, 1959  
 Methody Ljuminestentsiogo analiza; materialy soveshchaniya (Methods for  
 Luminescence Analysis: Materials of the 8th Conference), Minsk, Lit. no  
 AN BSSR, 1960. 147 p. 1,000 copies printed.

**Sponsoring Agency:** Akademii nauk po Ljumineschiyu SSSR. Institut fiziki  
 General Ed.: V. A. Borovskich; Ed.: I. Timofeev, Tech. Ed.:  
 R. Olszyna.

**Author(s):** This collection of articles is intended for chemists and phys-  
 ics interested in molecular luminescence, and for scientists per-  
 sonnel concerned with applications of this and related phenomena in  
 research in the life sciences.

**Content:** The collection contains 28 papers read at the Eighth Con-  
 ference on Luminescence, which took place 19-24 October, 1959 Place  
 of conference not given. These studies are concerned principally  
 with the development of new luminescence methods for quantitative  
 and qualitative chemical analysis, and with the applications of lum-  
 inescence in medical and biological research. They discuss lumines-  
 cent methods for the determination of uranium, mercury, radioactive  
 aluminum, boron, and other elements as well as luminescence methods  
 for the diagnosis of skin cancer and the detection of grape virus.  
 Pathogenic microorganisms etc. The structural details of new in-  
 struments for luminescence analysis is described. The conference  
 was not concerned with studies on the characteristics of crystal  
 phosphors. There is a discussion of the construction of some  
 spectrometers in molecular luminescence in the course of the joint and  
 joint proceeding the conference. The articles of V. K. Kavtyan,  
 D. T. and of T. V. Pashkov (pp. 19) have been annotated because  
 of their importance. No personalities are mentioned. References  
 accompany most of the articles.

Borovskich, Ye. A. Testing the Fluorescence Properties of  
 Fluorophores in Isocyanate

Prishibnikov, A. [All-Union Scientific Research Institute  
 of Chemical Reagents]. Dose for Fluorescence Microscopy

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Kutateladze, V. K. [Institut organičeskoy khimii, Izhevsk]  
 T. D. Zaitseva, N. V. Aszkenazi [Institute of Organic Chemistry Izhevsk]

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[Preparation and Application of  
 Orange-red Fluorescent Naphthalene-2-Pyrene-

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Ornits, V. V. [Institut organičeskoy khimii, Izhevsk]  
 I. D. Zaitseva, N. V. Aszkenazi [Institute of Organic Chemistry Izhevsk]  
 The authors report on the synthesis of an organic luminescent  
 lumogen which exhibits an orange-red luminescence after  
 exposure to ultraviolet light. The new lumogen has  
 made it possible to use luminescence in defectoscopy in the  
 electric and electronic vacuum-tube industry for the de-  
 tection of leaks in the walls of glass products, and to, in  
 some cases, simpler and more sensitive than the standard  
 methods of mass spectroscopy.]

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Petrikovskii, V. V. and V. K. Kavtyan [Institute of Organic  
 Chemistry Izhevsk]. N. D. Zolotukhin, A.G. Ustun [Method of  
 Preparing Solid With Luminescent and Photochromic Properties  
 [The authors discuss a further application of luminescence,  
 that is, a method using solid dried with a luminescent sub-  
 stance to study acid-doped sulfur dioxide during their con-  
 centration into wide use in the USSR and other countries in re-  
 cent years.]

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Borovskich, M. S., G. A. Galaktionov, N. A. Smirnov, and  
 N. V. Leonovna [Bogorodsky Pedagogical University, Izhevsk]

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N. V. Leonovna [Bogorodsky Pedagogical University, Izhevsk]  
 [Technical Field An-Nasr (Institute of Physics AS Pakistan)].  
 Effect of Adherent Water on the Luminescence of Colloidal  
 Materials

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"APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343420012-1

MIKHAYLOVA, L.A.; YEFREMOVA, L.N.; PRYANISHNIKOV, A.A.

Preparation of *L*-rhamnose. Trudy IREA no.23:67-73 '59.  
(MIRA 13:7)  
(Rhamnose)

APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001343420012-1"

PRYANISHNIKOV, A.A.; GRIGOROV, I.A. [deceased].

Obtaining 2-methylfuran and its homologs from wood chemistry plant residues. Gidroliz. i lesokhim. prom. 11 no.2:16-17 '58. (MIRA 11:3)  
(Furan) (Wood-using industries--By-products)

PRYANISHNIKOV, A.A.; OSNOVSKAYA, V.M.; RAYKHLEN, N.P.

**APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001343420012-1**

Synthesis, properties, and use in histochemistry of taurine-zinc salts with electron-acceptor substituents. Trudy  
REF. no.26:139-145 '63. (MIRA 16:6)

PHASE I RANK EXPLOITATION 507/510

**Source.** Vsesoyuznyy nauchno-tekhnicheskiy institut khimicheskikh reakcii  
Vsevobuchetnoye vydeleniye chistykh i reaktsionnykh sostoyaniy (High Purity Substances  
and Reagents; Collection of Articles) Moscow, Goskhimizdat, 1959,  
186 p. (Series: Test-Prod., Vol. 23) Errata slip inserted. 1,710  
copies printed.

**Sponsoring Agency:** USSR, Soviet Ministry of Chemical Industry (Minzhsintz).

**Ed.:** Yu.V. Sazanov, Tech. Ed.; M.G. Shirkov; Editorial Board of Series:  
V.G. Arshin, V.M. Grinko, R.P. Lantsov (Deputy Ed.), A.M. Tukin,  
G.I. Mal'ko, G.I. Mil'monyov, G.A. Perlov (Deputy Eds.), and  
I.G. Sharpen.

**PURPOSE:** This book is intended for personnel of chemical research and industrial  
chemical laboratories.

**CONTENTS:** The book contains 56 articles by scientists of the Scientific Research  
Institute for Chemical Reagents (ZRS) treating substances which may be adopted  
by different branches of industry in production, analysis, and analytical work  
of gaseous and organic substances or high purity reagents, vehicles, and references  
accompany each article. So far mentioned are mentioned.

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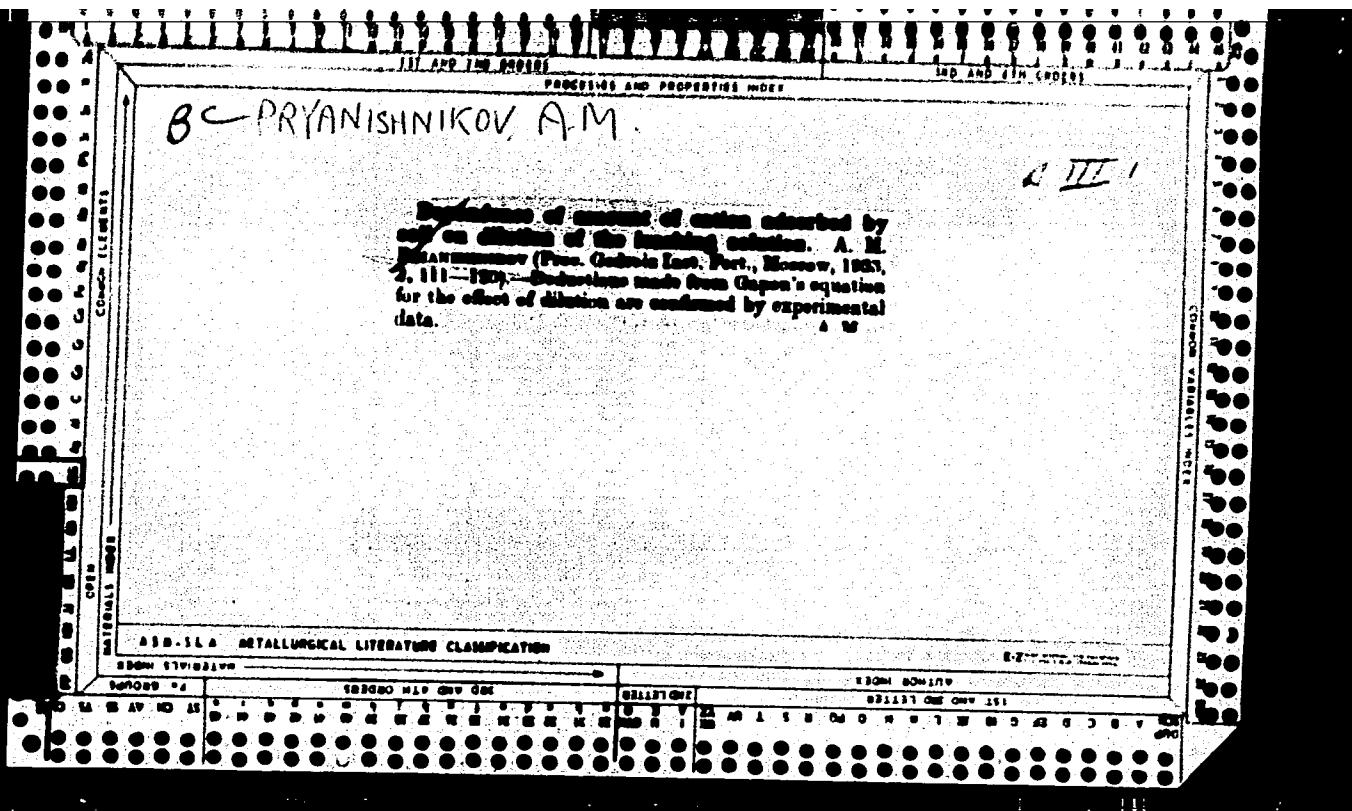
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PRIANISHNIKOV, A.A.

Purification of water-soluble organic liquids by extraction with  
secondary oils. Report No.1. Trudy IREI no.22:174-177 '58.

(MIRA 14:6)

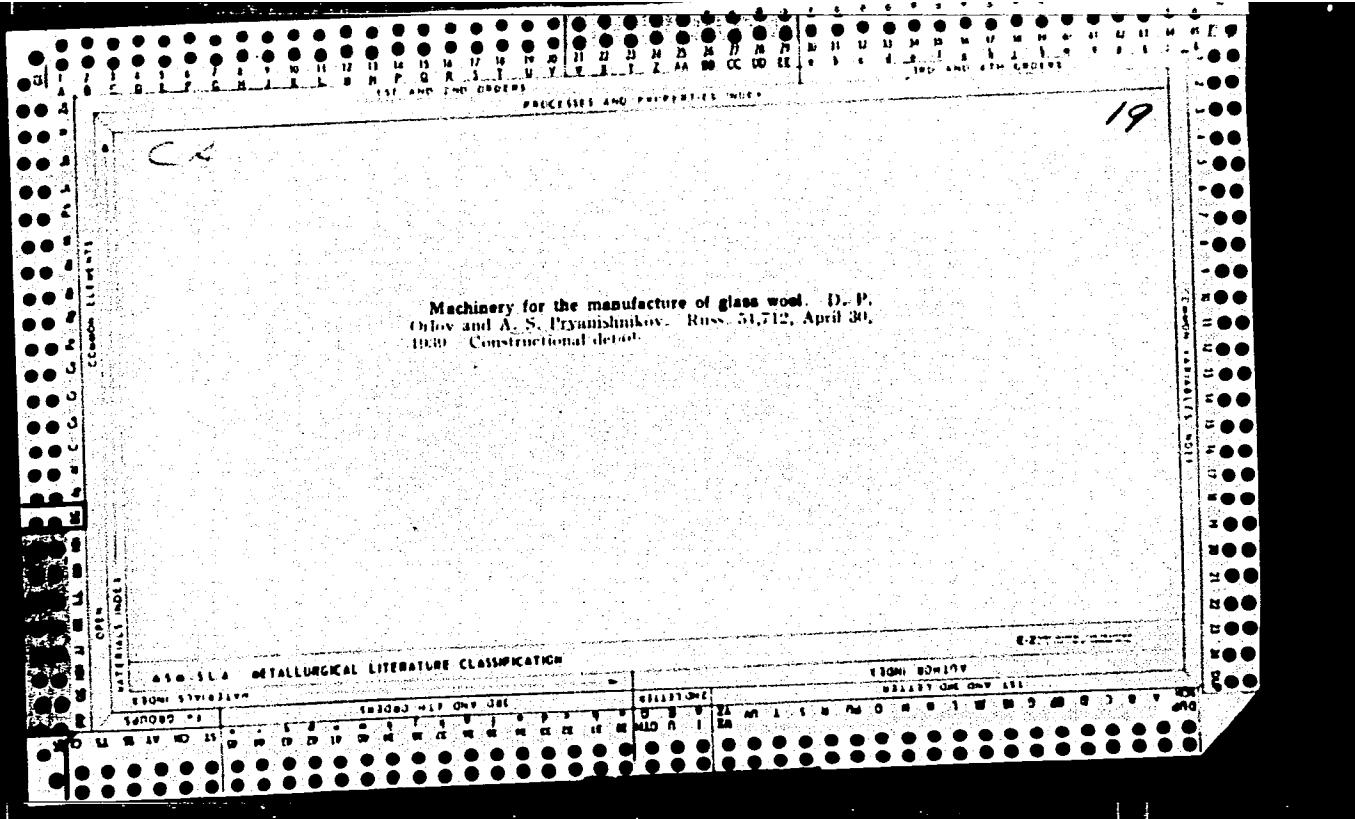
(Extraction(Chemistry))  
(Oils and fats)

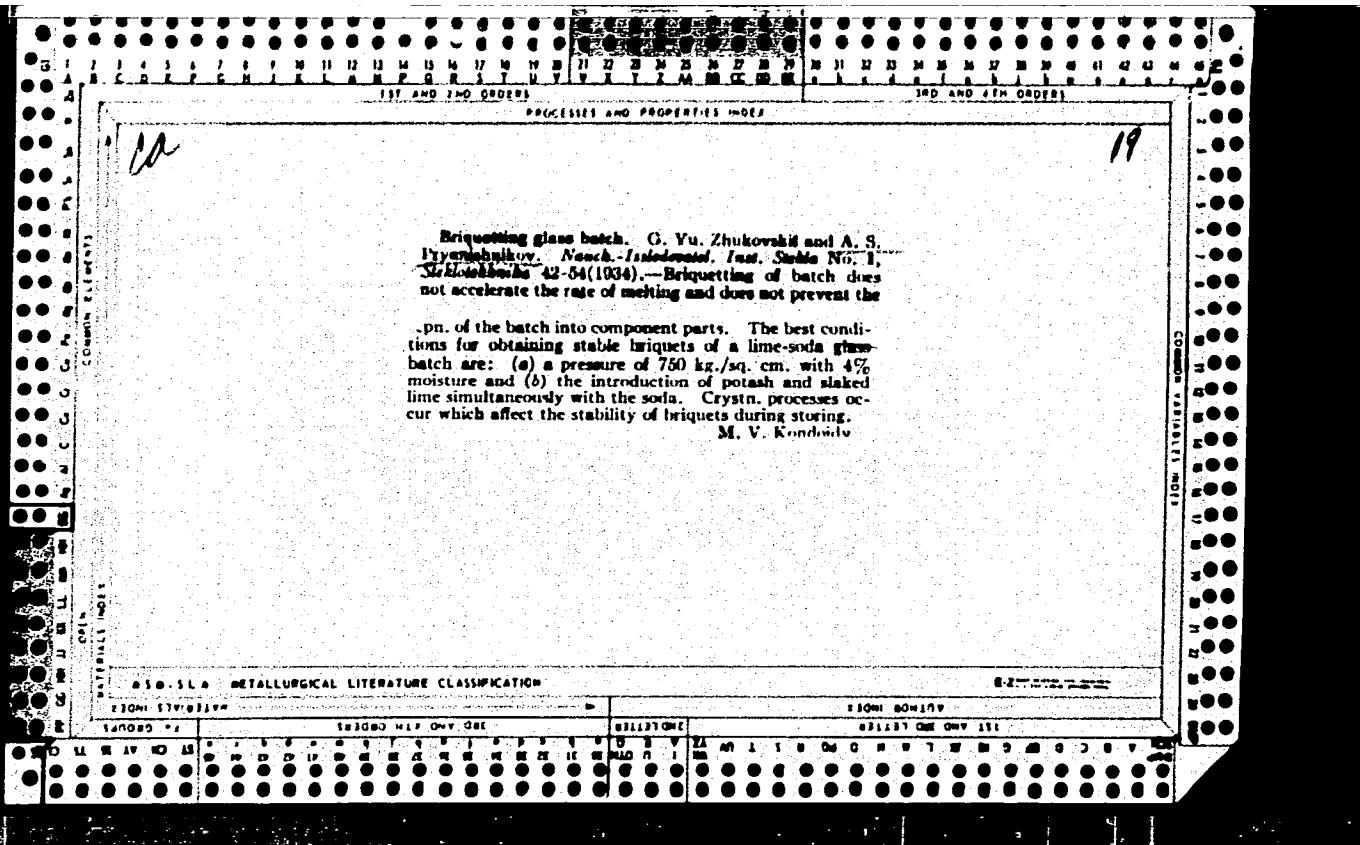


*Bcs**Ceramic Products  
plus*

1294. Manufacture of laboratory ware and equipment from heat-resistant glass. - A. S. PIVANISHNIKOV (Stekl. Keram., 7, No. 11, 10, 1950). Heat-resistant glass (<81% SiO<sub>2</sub>, <5% alkali oxides) is difficultly fusible and is melted at high temps. An addition of B<sub>2</sub>O<sub>3</sub> (11-12%) considerably facilitates melting, and this glass is now made in special periodic oil-fired tanks at temps as high as 1,800-1,700°C. Fuel is fed by burners at an air pressure of 1.5-2 atm. The fuel oil is pre-heated to 80° C. A tank runs continuously for 6-7 months and is then repaired, the sides, ports, suspended walls, checkers and dog-house being replaced; the roof and the tank bottom are replaced after 2-3 runs. Non-transparent quartz blocks of 300 × 230 × 80 mm. are used to the depth of 180 mm., i.e. the depth to which the tank is emptied each day. Batches for heat-resistant glass are tabulated. The batch is fed at 1,510°-1,570° C., melted at 1,800°-1,820° C., and worked at 1,540°-1,480° C.

All small ware is made semi-automatically. In 6½ hr. two men produce 300-1,100 pieces, depending on size. Ware is annealed for 2 hr. at 600° C. (3 figs., 1 table.)





B1 glass, continuous delivery

Manufacture of laboratory ware and equipment from heat-resistant glass. A. S. Ilyanushnikov (Strk. Keram., 1950, 7, No. 11, 10; Strk. Keram., 1951, 212A)—Addition of 11–12% of  $\text{Be}_2\text{O}_3$  to heat-resistant glass ( $\text{SiO}_2 > 81$ , and alkali oxides  $< 3\%$ ) facilitates melting. The glass is made in special periodic oil-fired tanks at temp. up to 1600–1700°. After continuous operation for 5–7 months the sides, parts, suspended walls, chequers, and dog-houses are replaced; the roof and bottom are replaced after 2–3 years. Non-transparent quartz blocks are used up to the depth to which the tank is emptied daily. Batches for heat resistant glass are tabulated. The batch is fed in at 1510–1570°, melted at 1600–1620°, and worked at 1540–1700°. All small ware is made semi-automatically and annealed for 2 hr. at 800°.

Burr. Keram. Res. Ass. (CI).

KHALCHEN, K.P.; PRYAMISHNIKOV, A.S.; IOVLEVA, G.F.

Mechanized melting of translucent thermometric glass in a vertical  
drawing machine. Stek. i ker. 22 no.7:53-35 Jl '65. (MIRA 18:9)

L. Klinskiy termometrovyy zavod.

PRYANISHNIKOV A. S.

312+1

1291. Manufacture of laboratory ware and equipment from heat-resistant glass. A. S. PRYANISHNIKOV (*Slekt. Keram.*, 7, No. 11, 1950). Heat-resistant glass ( $\geq 87\%$   $\text{SiO}_2$ ,  $<5\%$  alkali oxides) is difficultly fusible and is melted at high temps. An addition of  $\text{B}_2\text{O}_3$  (11–12%) considerably facilitates melting, and this glass is now made in special periodic oil-fired tanks at temps. as high as 1,680–1,700°C. Fuel is fed by burners at an air pressure of 1.5–2 atm. The fuel oil is pre-heated to 80°C. A tank runs continuously for 5–7 months and is then repaired; the sides, ports, suspended walls, checkers and dog-houses being replaced; the roof and the tank bottom are replaced after 2–3 runs. Non-transparent quartz blocks of 300 × 230 × 80 mm. are used to the depth of 160 mm., i.e. the depth to which the tank is emptied each day. Latches for heat-resistant glass are tabulated. The hatch is fed at 1,510–1,570°C, melted at 1,600–1,629°C, and worked at 1,540–1,480°C.

All work here is made semi-automatically. In 6½ hr. two men produce 300–1,100 pieces, depending on size. Ware is annealed for 2 hr. at 600°C. (3 figs., 1 table.)

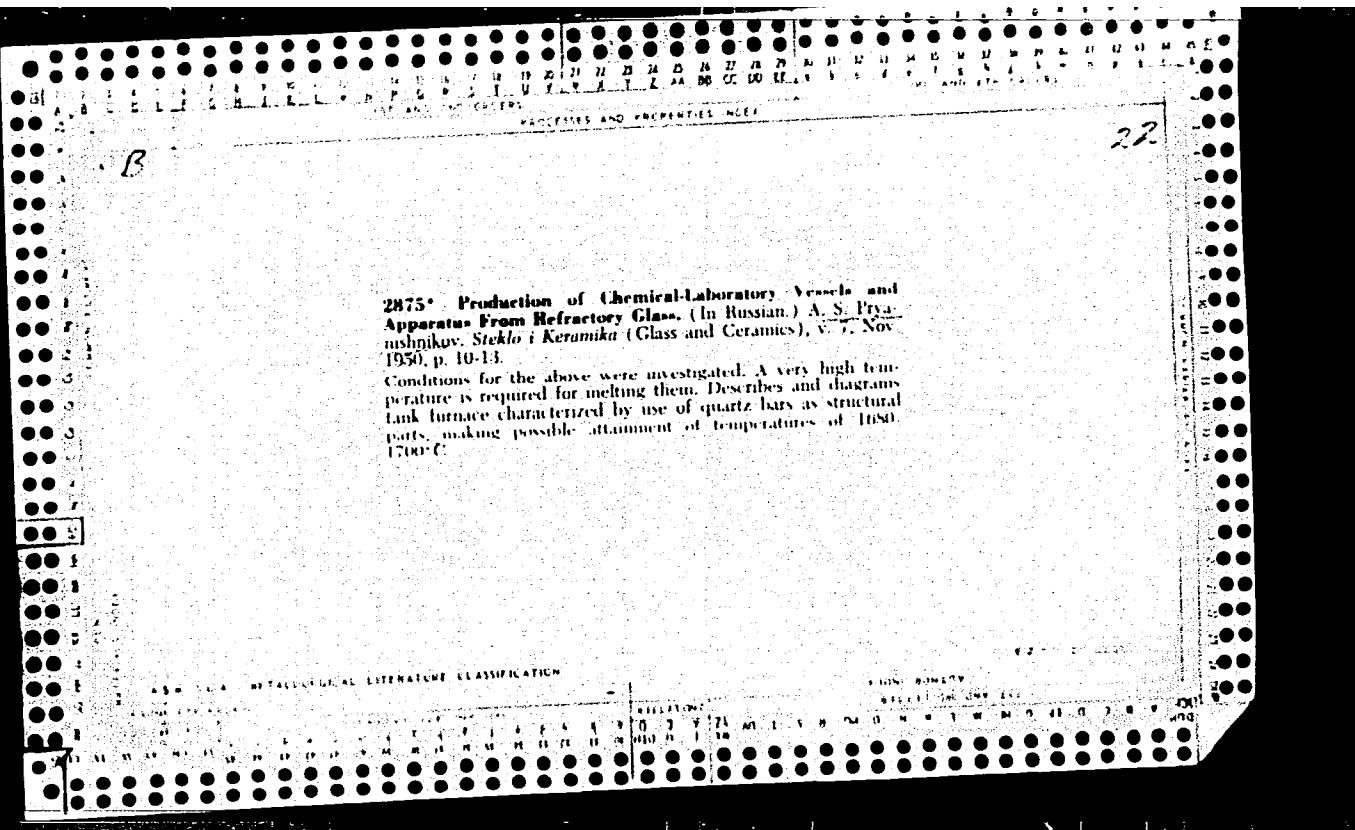
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**Production of chemical laboratory ware from refractory**

From: A. S. Pryanishnikov. *Sakhar i Krem.* 7, No. 11, 10-13(1960).—Batch 1 melted in an oil-fired periodic tank designed by O. A. Udrovskiy and capable of reaching 1600-1700°. The tank campaign is 6-7 months, followed by cold repairs during which the batch, part intake, and mixing chamber, suspended walls and cast-iron supports, and regenerator nozzles are replaced. The bottom and crown were replaced after 2-3 campaigns. Silica was replaced with quartz blocks in the batch to a depth of 100 mm.; this improved the quality of the glass and should prolong tank life to at least 1 year. The batch was charged at 1810-1870°, melted at 1650-1680°, and worked at 1540-1620°. Compos. of the glass was  $\text{SiO}_2$  79.5,  $\text{Al}_2\text{O}_3$  1.0,  $\text{B}_2\text{O}_3$  12.5,  $\text{CaO}$  0.5,  $\text{Na}_2\text{O}$  4.5, and  $\text{K}_2\text{O}$  3.0%. For some time it was impossible to make quality glass because of stems, cords, stiffeners, and frequent devitrification of the whole surface of the melt; to overcome this, the glass compo. was changed to  $\text{SiO}_2$  81.0,  $\text{Al}_2\text{O}_3$  2.8,  $\text{B}_2\text{O}_3$  11.7-12.0,  $\text{CaO}$  0.8,  $\text{MgO}$  0.6,  $\text{Na}_2\text{O}$  3.4, and  $\text{K}_2\text{O}$  1.0%. The batch was melted at 1680° and worked at 1650-1680°. These high temps. caused silica blocks to soften and undergo rapid destruction; a silica "paste" forming at the blocks gradually penetrated the melt. It was necessary to remove the foam and place fireclay booms in the melt. B. Z. Komach

1951



PRYANISHNIKOV, A.V.

Methods and devices for analyzing electroencephalographs. Izv.vys.  
ucheb.zav.; prib. 6 no.1:150-160 '63. (MIF 16:2)

1. Leningradskiy institut tochnoy mekhaniki i optiki. Rekomendovana  
kafedroy radiotekhniki.  
(Electroencephalography)

PRYANISHNIKOV, A.V.

Elements of mountain-steppe vegetation in the Far North of the  
Eastern Siberian Plateau. Bot.zhur.41 no.11:1646-1647 N '56.  
(MLRA 10:1)

(Krasnoyarsk Territory--Botany)

PRYANISHNIKOV, A.V.

Formation of meadows on the bottom of dry lakes in the tundra.  
Bot. zhur. 40 no. 3:426-429 My-Je '55. (MIRA 8:10)

1. Vsesoyuznyy institut polyarnogo zemledeliya i zhivotnovodstva,  
Leningrad  
(Pastures and meadows)