

Transient processes in ...

S/108/63/018/002/009/010
D413/D308

frequency varies in rectangular and triangular patterns. The author
thanks Professor D. V. Ageyev for comments. There are 4 figures.

ASSOCIATION: Nauchno-tehnicheskoye obshchestvo radiotekhniki i
elektrosvyazi im. A. S. Popova (Scientific and Tech-
nical Society of Radio Engineering and Electrical
Communications imeni A. S. Popov) ^{Abstracter's}
note: Name of Association taken from first page of
journal]

SUBMITTED: February 3, 1962

Card 2/2

ZELENIN, A.P.

Contribution to the theory of FM reception with follow-up tuning.
Radiotekhnika 18 no.12:13-18 D '63. (MIRA 17:1)

1. Deystvitel'nyy chlen Nauchno-tekhnicheskogo obshchestva radiotekhniki
i elektrsovyyazi imeni Popova.

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964220018-8

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964220018-8"

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CIA-RDP86-00513R001964220018-8

Card 1 / 2

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964220018-8"

GLAZKOV, N.N.; ZELENIN, A.P.

Limiter for radio relay communication lines. Izv.vys.učeb.zav.;
radiotekh. 8 no.5:617-619 S-0 '65.

(MIRA 18:12)

1. Submitted March 11, 1965.

AUTHOR
TITLE

ZELENIN A.V.
The Alterations in the Thyroid Gland after Removal of the Sensitive
Ganglion of Vagus.

20-4-54/61

PERIODICAL

(Izmeneniya shchi tovidnoy zhaleze pri udalenii chuvstvitel'ngo uzla
bluzhdayshchego nerva -Russian)
Doklady Akademii Nauk SSSR, 1957, Vol 113, Nr 4, pp 917-919 (U.S.S.R.)
Received 6/1957

Reviewed 7/1957

ABSTRACT

The share of the vagus nerve for securing the sensitive innervation of the thyroid gland was proved by a number of papers, among them also experimental ones. However, the character of the modification in the gland itself after eliminating the sensitive fibres had practically not been investigated in this connection, although a number of papers dealt with the problem, for the nerves were only unilaterally cut through and the other half of the gland was taken as a control. Only slight or no modifications took place on this occasion. Only those scientists, who investigated the gland after a bilateral cutting through the throat nerves, had been able to ascertain remarkable or very serious changes. The author carried out his investigations on 32 healthy cats. The denervation of the gland was accomplished by uni- or bilateral removal of the ganglion nodosum. The animals were killed 22 hours to 184 days after the operation. After the unilateral removal of the ganglion nodosum from the second day a considerable widening of the blood vessels in the thyroid glands becomes noticeable, a remarkable number of polymorphic-granular leucocytes accumulates in them. These phenomena increase for 7-9 days and then remain unchanged. Only after

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The Alterations in the Thyroid Gland after Removal of the
Sensitive Ganglion of Vagus.

20-4-54/61

6 months can a tendency towards normalization of the vascular lumen be noticed. Parallel to the interruptions in the vessel the filtration of the gland tissue with neutrophil leucocytes develops even into the interior of the follicular cells. Most of the follicles widen or flow together. They are overflowed by the oxyphil colloid which, as a rule, lacks vacuolisation. Epithelial cells and their nuclei change their shape and this also occurs in follicles which are not widened. In many cases the peeling of the epithelium takes place in the vascular lumen. In connection with the almost general spreading of the above mentioned modifications, wall destruction and leucocytic infiltration only touches some parts of the gland. All these phenomena are also observed on the other half of the thyroid gland which is not denervated. The changes taking place after a bilateral removal of the ganglion nodosum are on the whole similar to those described, but they are more intense. However, even this operation usually does not cause any modification of the whole gland. In the case of most of the animals one part of the follicle always remains normal. Only in individual cases almost no normal follicle is found. Unfortunately it is not always possible to watch the modification dynamics in the thyroid gland after a bilateral removal of the ganglion nodosum, as the animals do not survive more than three days (and nights). They perish with serious destructions of the lungs and heart. Thus it was shown that the infiltration of the organs by neutrophils is a regular consequence of the deprivation of their sensible innervation. By this the fact of the sensible innervation of the thyroid gland by the neu-

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Sensitive Ganglion of Vagus.

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rons of the vagus nerve is confirmed. Innervation is a crossed one, as after a unilateral operation the other half of the gland reacts. Thus, the opinion on homolateral innervation is refuted and the errors committed by the scientists, who, on the occasion of a unilateral operation, took the other half of the gland as a control, have been rectified. The analysis of the author's results shows that the intactness of the innervation of the vagus nerve is necessary for the maintenance of the normal structure of the thyroid gland. The relatively insignificant extent of pathological changes occurring after the operation gives reason to assume that the thyroid gland has still another source of sensible innervation. Comparison with other organs leads to the assumption that the sensible ganglia of the spinal marrow are most likely to be found in this source.
(4 illustrations on a plate, 5 citations from Slavic publications).

ASSOCIATION Second Medical National Institute "I.V.Tsalin", Moscow
PRESENTED BY SHTERN L.S., Member of the Academy
SUBMITTED 14.12.1956
AVAILABLE Library of Congress
Card 3/3

ZELENIN, A.V.

20-6-49/59

AUTHOR: ZELENIN, A.V.

TITLE: The Changes Taking Place in the Thyroid Gland after Removal of the Spinal Sensitive Ganglia. (Izmeneniya v shchitovidnoy zheleze posle udaleniya spinnomozgovykh chuvstvitel'nykh uzlov, Russian)

PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol 113, Nr 6, pp 1357-1360 (U.S.S.R.)

ABSTRACT: The peripheral neuron protuberances of the sensory spinal ganglia were found with certainty to form receptor endings in almost all inner organs. At the same time the experimental investigations for proving the innervation of the thyroid gland and its extra-organic vessels did not achieve any positive results. A sensory spinal cord innervation was, however, proved with the esophagus to which the thyroid gland is closely attached. This indirectly is an indication of the probability of such an innervation also of the thyroid gland as is proved by some anatomic investigations. Vascular disorder and tissue infiltrations with neutrophile leucocytes develop in deafferent organs. Therefore the author decided to study the thyroid gland after removal of the mentioned ganglia. 15 full-grown and healthy cats, which had these ganglia removed on both sides on the level of the cervical- and upper thoracic segments, served as material. The author had shown in an earlier work that the removal of the G.nodosum n.vagi causes important changes in the thyroid gland. These changes could, however, not

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The Changes Taking Place in the Thyroid Gland
after Removal of the Spinal Sensitive Ganglia.

20-6-49/59

be proved to have developed in consequence of the elimination of the efferent fibres of the G.nodosum. Comparison of the results of the earlier work with that of the present one showed that the changes in the thyroid gland after removal of the G.nodosum and the sensory spinal cord ganglia were of one and the same kind. This proves that the affection of the gland after removal of the G.nodosum depends on its deafferentation. At the same time, results make it possible to believe that the maintainance of the sensory innervation is of the same importance for the maintainance of the normal structure of the gland as for the maintainance of the structure of other organs. (4 illustrations, 8 citations from Slav publications)

ASSOCIATION: Second Moscow Medical Institute "I.V.STALIN"
PRESENTED BY:
L.S.SHTERN, Member of the Academy
SUBMITTED: 22.1.1957
AVAILABLE: Library of Congress
Card 2/2

USSR/Human and Animal Physiology - Internal Secretion.
The Thyroid Gland.

T

Abs Jour : Ref Zhur Biol., No 3, 1959, 12954
Author : Zelenin, A.V.
Inst : Moscow Medical Institute
Title : Influence of Extipation of g. nodosum n. vagi on
Function of Thyroid Gland (Data of Radioactive Iodine
Uptake - I¹³¹)
Orig Pub : Uch. zap. 2-go Mosk. med. in-ta, 1957, 6, 88-93

Abstract : In normal cats injected subcutaneously with 2 - 2.5
millicurie of I¹³¹ the maximal uptake (MU) of I¹³¹ in
the thyroid gland (TG) reached ~ 35%, and the uptake
of I¹³¹ increased for 72 hours. 37, 54, or 109 days af-
ter unilateral extipation of g. nodosum n. vagi with
MU of I¹³¹ the TG shrank 1 $\frac{1}{2}$ - 2 times or more in size,

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USSR/Human and Animal Physiology - Internal Secretion.
The Thyroid Gland.

T

Abs Jour : Ref Zhur Biol., No 3, 1959, 12954

and MU was observed approximately 24 hours after injection of I¹³¹. Flattening of the follicular epithelium, condensation of colloid, and an increase in the follicular size were observed.

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- 69 -

ZELENIN, A. V., Cand Med Sci -- (diss) "Nervous apparatus of the thyroid
gland and its role in maintenance of ^{the} ~~the structural completeness~~ ^{integrity} Mos,
1958. 16 pp (2nd Mos Med Inst im N. I. Pirogov), 200 copies (KL, 18-58,
103)

-107-

GRIGOR'YEVA, T.A., prof., red.; ZELENIN, A.V., kand. med. nauk, red.;
SAVICH, G.A., kand. med. nauk, red.

[Transactions of the First Conference of Young staff members of
Morphological Laboratories in Moscow] Trudy pervoy konferentsii
molodykh nauchnykh sotrudnikov moskovskikh morfologicheskikh
laboratori. Pod red. T.A.Grigor'evoi, A.V.Zelenina i G.A.Savich.
Moskva, Vses. ob-vo anatomov, gistolologov i embriologov, 1959. 139 p.
(MIRA 15:4)

1. Konferentsiya molodykh nauchnykh sotrudnikov moskovskikh mor-
fologicheskikh laboratori. 1st.
(Morphology(Animals))—Congresses))

ZELENIN, A.V.; LANDSHMAN, N.K.

Analyzing the picture of spinal sensory ganglia as observed in the fluorescence microscope. Zhur. ob. biol. 21 no.6:461-464 N-D '60,
(MIRA 14:1)

1. Kafedra gistologii i TSentral'naya nauchno-issledovatel'skaya
laboratoriya 2-go Moskovskogo Gosudarstvennogo meditsinskogo
instituta im. N.I.Pirogova.

(SPINAL CORD) (FLUORESCENCE MICROSCOPY)

ZELENIN, A.V. (Moskva, Kutuzovskiy prospekt, kv. 130)

Luminescence microscopy in the histochemistry of nucleic acids.
Arkh. anat. i embr. 40 no.3:88-98 Mr '61. (MIRA 14:5)

1. Kafedra gistologii i embriologii (zav. - chlen-korrespondent AN
SSSR prof. G.K.Khrushchov) 2-go Moskovskogo gosudarstvennogo medit-
sinskogo instituta imeni N.I.Pirogova.

(NUCLEIC ACIDS) (FLUORESCENCE MICROSCOPY)

S/020/61/141/003/016/021
B103/B110

AUTHORS: Brumberg, Ye. M., Meysel', M. N., Corresponding Member AS USSR, Barskiy, I. Ya., Zelenin, A. V., and Lyapunova, Ye. A.

TITLE: Ultraviolet luminescence of cells in mitotic division

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 141, no. 3, 1961,
723 - 725

TEXT: Cells and tissues grown outside the organism were studied: (a) human: an inoculated decent of amnion cells; (b) cultures of embryonic epithelium; (c) of fibroblasts; (d) animal: primary cultures of the kidneys of guinea pigs and monkeys. Single tissue cultures were grown on quartz glass and examined by ultraviolet-luminescence microscopy either living (in physiological salt solution) or after fixing by methanol. The methods had been described previously (Ye. M. Brumberg et al., Biofizika, 6, No. 1, 114 (1961); Ye. M. Brumberg et al. Tsitologiya, 2, 589 (1960); Ye. M. Brumberg, Zhurn. obshch. biol. 27, No. 6,

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Ultraviolet luminescence of cells in...

S/020/61/141/003/016/021
B103/B110

401 (1956)). Microphotographs showed that the cells undergoing mitosis differed from cells at rest in the following facts: The cells at rest weakly fluoresce; fluorescence increases already during the early prophase and reaches maximum intensity in the middle of the metaphase. Then, it slowly decreases; however, until complete separation of the daughter cells, it exceeds the fluorescence of the cells at rest undergoing interkinesis. The cell nucleus, unlike the total cytoplasm, does not fluoresce. Dark, not fluorescing chromosomes can be seen on the background of the cytoplasm. The absorption of shortwave ultraviolet rays ($250-270 \text{ m}\mu$) by the cells increases with rising intensity of fluorescence. Absorption and fluorescence patterns interrelated like a negative and a positive; in both images, however, the chromosomes remain dark. The fluorescence of cells at rest is not so constant as that of dividing cells. There are always individual groups of brightly fluorescing cells at rest. In most cases these are degenerating, perishing cells whose increasing fluorescence is not accompanied by increased ultraviolet absorption. Chromoscopic examination (Ye. M. Brumberg. DAN, 25, 473 (1939)) showed degenerating cells at rest and dividing cells are

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S/020/61/141/003/016/021
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Ultraviolet luminescence of cells in ...

differently colored. Selective extraction of nucleotides, nucleic acids, and lipoids with perchloric acid in the cold and at 90°C, and with ribonuclease showed that the ultraviolet fluorescence of dividing cells is not due to the action of these extracted substances, except the bone marrow, the fluorescence of which rapidly decreases after extraction of nucleotides. The character of fluorescence cannot be changed by strong oxidizers and reducing agents (rongalite, potassium permanganate). 2% of urea somewhat increases the fluorescence of cells at rest. It is concluded that the intensity of fluorescence of cells undergoing mitosis is increased by high-molecular substances (most probably proteins containing cyclic amino acids) which are difficult to extract from the cell. This increase is possibly related to a reversible denaturation of protein in various physiological processes (muscular work). This might not be an absolutely formal analogy, since the occurrence of contractile proteins in the cell during mitosis had previously been proved. These proteins effect the mechanical work of chromosome separation and cell division. The muscles differ from other tissues in their particularly strong ultraviolet fluorescence. It is less probable that cell fluorescence during division should be increased by low-molecular substances

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Ultraviolet luminescence of cells in ...

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which are produced in metabolic shifts or accumulated. This means that these shifts occur only in certain stages of mitosis (Refs. 8 and 9, see below), whereas an increase of fluorescence could be observed during all stages of division. Experiments will be continued. Ye. S. Zalmanzon is thanked for supplying the tissue cultures. There are 11 references: 7 Soviet and 4 non-Soviet. The three most recent references to English-language publications read as follows: Ref. 8: H. A. Went, Ann. N.Y. Acad. Sci., 90, Art. 2, 422 (1960); Ref. 9: D. Mazia, Sulfur in Proteins, R. Bensch et al. edit., N.Y., 1959; Ref. 10: J. Brachet, The Biochemistry of Development, London, 1960.

ASSOCIATION: Institut radiatsionnoy i fiziko-khimicheskoy biologii Akademii nauk SSSR (Institute of Radiation and Physico-chemical Biology of the Academy of Sciences USSR)
Institut tsitologii Akademii nauk SSSR (Institute of Cytology of the Academy of Sciences USSR)

SUBMITTED: August 28, 1961

Card 4/4

ZELENIN, A.V.; LYAPUNOVA, Ye.A.

Fluorescence microscopy of dividing cells. Dokl. AN SSSR 141
no.4:963-965 D '61. (MIRA 14:11)

1. Institut radiatsionnoy i fiziko-khimicheskoy biologii AN
SSSR. Predstavлено академиком V.A. Engel'gardtom.
(Karyokinesis)
(Fluorescence microscopy)

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964220018-8

ZELENIN, A.V. (Moskva)

Pinocytosis. Usp.sovr.biol. 53 no.3:364-374 My-Je '62. (MIRA 15:9)
(CELLS)

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964220018-8"

VOROTNITSKAYA, N.Ye.; ZELENIN, A.V.; LYAPUNOVA, Ye.A.; MEYSEL', M.N.

Luminescent microscopic study of normal and tumoral cells
fluorochromated with acridine orange at different pH values.
Dokl. AN SSSR 152 no.3:724-726 S '63. (MIRA 16:12)

1. Institut radiatsionnoy i fiziko-khimicheskoy biologii AN SSSR.
2. Chlen-korrespondent AN SSSR (for Meysel').

ZELENIN, A. V.; LYAPUNOVA, Ye. A.

"On the nature of cytoplasmic granules having red fluorescence and produced in living cells treated with acridine orange."

report submitted for 2nd Intl Cong, Histochemistry & Cytochemistry, Frankfurt, 16-21 Aug 64.

Moscow.

Inst Physico-Chemical & Radiation Biology, AS USSR, Vavilov Street 16, Moscow B-312.

ZELENIN, A.V.

Distribution of ribonucleic acid in cells of the exocrine
parenchyma of denervated pancreas. Izv. AN SSSR. Ser. biol.
no.6:894-899 N-D '64. (MIIti 17:11)

1. Institute of Radiation and Physico-Chemical Biology, U.S.S.R.
Academy of Sciences, Moscow.

ZELENIN, A.V.; LYAPUNOVA, Ye.A.

Effect of acridine orange on the incorporation of S^{35} methionine
in the cells of tissue cultures. Dokl. AN SSSR 158 no.1:221-224
S-0 '64 (MIRA 17:8)

1. Institut radiatsionnoy i fiziko-khimicheskoy biologii AN SSSR.
Predstavлено академиком V.A. Engel'gardtom.

ZELENIN, A.V.

Morphological and cytochemical nature of red acridine orange
gramules. Izv. AN SSSR. Ser. biol. no.6:925-928 N-D '65.
(MIRA 18:11)

1. Institut molekulyarnoy biologii AN SSSR.

ZALMANOV, Ye.S.; ZELENIN, A.V.; KAFIANI, K.A.; LOBAREVA, L.S.; LYAPUNOVA,
Ye.A.; TIMOFEEVA, M.Ya.

Effect of some antineoplastic antibiotics on the synthesis of
nucleic acids and reproduction of viruses in a culture of human
amnion cells (strain FL). Antibiotiki 10 no.7:615-622 J1 '65.
(MIRA 18:9)

1. Institut radiatsionnoy i fiziko-khimicheskoy biologii AN
SSSR, Moskva.

LYAPUNOVA, Ye.A.; PETRIKEVICH, S.B.; ZELENIN, A.V.

Intravitality of fluorescence microscopic studies conducted
with the help of fluorochromes of acridine orange and 3,4-benzo-
pyrene. Izv. AN SSSR. Ser. biol. no.6:928-932 N-D '65.
(MIRA 18:11)

1. Institut molekulyarnoy biologii AN SSSR.

ACC NR:	AP6027889.	(N)	SOURCE CODE:	UR/0390/66/029/004/0481/0484
AUTHOR:	Zelenin, A. V.; Lyapunova, Ye. A.			
ORG:	Institute of Molecular Biology, AN SSSR, Moscow (Institut molekulyarnoy biologii AN SSSR)			
TITLE:	Effect of acridine orange upon the nucleic acid synthesis in animal cells			
SOURCE:	Farmakologiya i toksikologiya, v. 29, no. 4, 1966, 481-484			
TOPIC TAGS:	nucleic acid synthesis, DNA, RNA, acridine orange, metabolic effect, CYTOLOGY, NUCLEIC ACID			
ABSTRACT:	Three micrograms of acridine orange (2,8-bis-dimethylaminoacridine) suppressed cellular DNA synthesis by 30—40% and that of RNA by 40—60%. M-RNA was affected least and p-RNA the most. It is believed that acridine orange affects nucleic acid synthesis in the same way as small doses of Actinomycin "D." [WA-50; CBE No. 11]			
SUB CODE:	06/	SUBM DATE:	12Aug65/	ORIG REF: 008/ OTH REF: 012
Card 1/1	UDC: 615.778.292-092:612.398.145.1.014.1			

ZELENIN, A.V.; BIRYUZOVA, V.I.; VOROTNITSKAYA, N.Ye.; LYAPUNOVA, Ye.A.

Separation of a subcellular fraction enriched with acridine orange
cytoplasmic granules. Dokl. AN SSSR 162 no.4:925-927 Je '65.
(MIRA 18:5)

1. Institut radiatsionnoy i fiziko-khimicheskoy biologii AN
SSSR. Submitted July 25, 1964.

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964220018-8

ZELENIN, A.V.; BARSKIY, V.Ye.; DANIL'TSEVA, G.Ye.

Problems of biology and medicine at the 13th All-Union Conference
on Luminescence. Izv. AN SSSR, Ser. biol. no.2:319-320 Mr-Ap '65.
(MIRA 18:4)

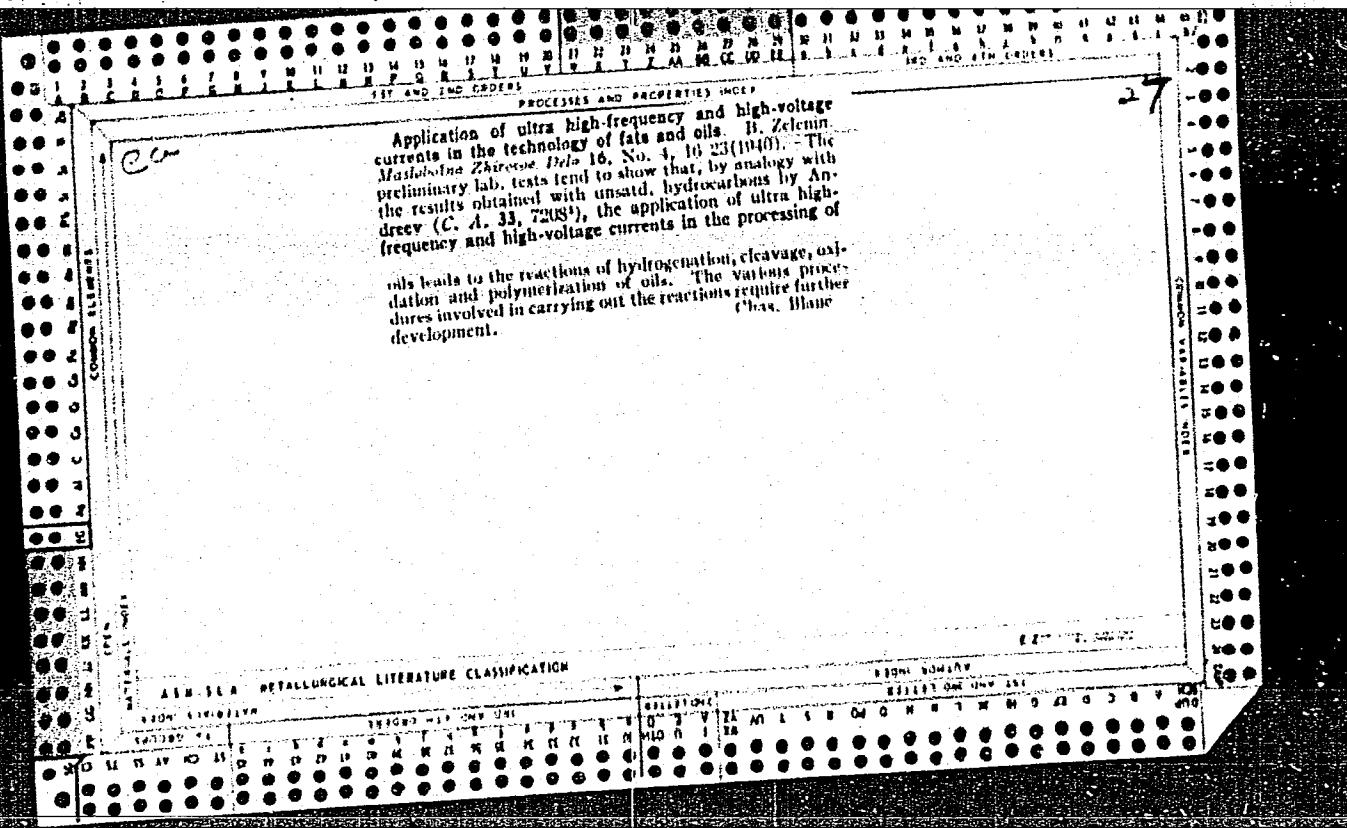
APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964220018-8"

ZELENIN, A.V.; KHRUSHCHOV, N.G.

Nature of red granules detected by fluorescence microscopy in
the cytoplasm of neutrophil leukocytes. Probl. genet. i perel.
krovi 9 no.3;26-32 Mr '64. (MIRA 17:10)

1. Laboratoriya funktsional'noy morfologii kletki (zav.- chlen-
korrespondent AN SSSR prof. M.N. Maysel') Instituta radiatsionnoy
i fiziko-khimicheskoy biologii AN SSSR i TSentral'naya nauchno-
issledovatel'skaya laboratoriya (zav.- dotsent E.M. Kogan) II
Moskovskogo meditsinskogo instituta imeni Pirogova.



ZELENIN, B.

Application of ultra high-frequency and high-voltage currents in the technology of fats and oils. B. Zelenin. *Mashinostroenie*, No. 16, No. 4, 13-23 (1951). The preliminary lab. tests tend to show that, by analogy with the results obtained with treated hydrocarbons by Andreev (*C. A.*, 33, 7293^a), the application of ultra high-frequency and high-voltage currents in the processing of

oils leads to the reactions of hydrogenation, cleavage, esterification and polymerization of oils. The various procedures involved in carrying out the reactions require further development.

ZELENIN, B.

Application of ultra high-frequency and high-voltage currents in the technology of fats and oils. B. Zelenin. *Maslobojny Zhurnal*, No. 4, 19-23 (1949).--The preliminary lab. tests tend to show that, by analogy with the results obtained with treated hydrocarbons by Andreev (*C. A.* 33, 7208*), the application of ultra high-frequency and high-voltage extracts in the processing of oils leads to the reactions of hydrogenation, cleavage, saturation and polymerization of oils. The various processes involved in carrying out the reactions require further development.

ZELENIN, B.M.; SAMSONOV, A.Ye.

The M.D.Obryvko beet unloading and stacking machine. Sakh.proz.
28 no.4:19-22 '54. (MLRA 7:7)

1. Voronezhskiy sakhsveklotrest (for Zelenin) 2. Glavsaokhar
(for Samsonov)
(Sugar industry--Equipment and supplies)

EXCERPTA MEDICA SEC 14 VOL 10/0 RAD/10.9.PGY V.4000 2Y

1083. ORGANOLEPTIC AND PHYSICO-CHEMICAL CHANGES IN FOODSTUFFS PRESERVED BY GAMMA-RAYS (Russian text) - Zelenin B. N. and Pavlova G. L. All-Union Scient. Res. Inst. of Canning and Vegetable-Dehydrating Indust., Moscow - TEZ. DOKL. VSES. KONF. PO PRIM. RADIO-AKTIV. I STABIL. IZOTOP. I IZIUCH. V NAROD. KHOZ. I NAUK. (Moskva) 1957 (188-189)

A study was made of the changes in foodstuffs preserved by gamma-rays in relation to the dose of radiation and duration of storage. The products to be irradiated were packed in standard glass or metal containers and hermetically sealed. Irradiation was carried out in the inner cavity of a cylindrical cobalt gamma-irradiator, the strength of the dose within the working space being 630 rep. Control samples were sterilized in an autoclave. The products to be irradiated were examined organoleptically before and after irradiation, and also during storage. Part of the irradiated samples was subjected to microbiological control after being kept in a thermostat. Duration of preservation of irradiated products was determined at room temperature. The authors conclude: (1) The degree of changes in the physico-chemical and organoleptic properties of foodstuffs under the influence of gamma-radiation depends on the magnitude of the dose and on the properties of the products themselves. (2) A dose of 2,000,000 rep ensures sterility of preserved foods but causes undesirable changes in the organoleptic properties of the products. Doses of 1,000,000-1,500,000 rep do not sterilize the products completely, limiting the duration of their preservation to 3-4 months. Doses of 300,000-500,000 rep limit the period of preservation to 1-3 weeks without altering the organoleptic properties of the irradiated products. (3) Changes in organoleptic properties of foodstuffs sterilized by gamma-rays are less marked in beef, fish, green peas, apple juice and carrot puree, and more marked in cauliflower, potatoes and carrots which have been peeled and covered with saline solution. (4) Irradiation of

vegetable oils with a dose of 1,000,000 rep leads to organoleptic changes. A dose of 11,000,000 rep leads to increase in the acid number, specific gravity and viscosity as well as to lowering of the iodine number of vegetable oils; some deodorizing of oils has also been noted.

Arkaev - Moscow (S)

ZELENIN, E. V.

Nachertatel'naia geometriia i cherchnie /Descriptive geometry and drawing/.
Izd. 2-e. Moskva, Gostekhizdat, 1953. 524 p.

SO: Monthly List of Russian Accessions, Vol. 7, No. 3, June 1954.

ZELENIN, F. P.

Agricultural Implements

Mechanizing the preparation of coarse feeds. Korm. baza 2 no. 8, '51

Monthly List of Russian Accessions, Library of Congress, July 1952. Unclassified.

ZELENIN, G. L., inzh.

Transmission of energy through a conducting shield in a varying magnetic field. Trudy NIITVCH no.1/2:24-34 '60. (MIRA 17:7)

ZELENIN, G. Ye.

11.2214
11.2131

2209

32819

2

S/020/62/142/001/017/021
B103/B110

AUTHORS: Gineburg, V. A., Yakubovich, A. Ya., Filatov, I. S.,
Shpanskiy, V. A., Vlasova, Ye. G., Zelenin, G. Ye.

TITLE: Production, pyrolysis, and photolysis of polyfluorinated azo
compounds of the aliphatic series

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 142, no. 1, 1962, 88-91

TEXT: Further methods of synthesizing polyfluoro azoalkanes (PFAA) and
their derivatives were elaborated. It was found that PFAA were formed:

(a) when reducing azoxy compounds by PCl_3 vapor in the vapor phase and
in H_2 atmosphere at 100-150°C: $\text{R}_f\text{N}-\text{H}(\text{O})\text{R}_f \xrightarrow{\text{PCl}_3} \text{R}_f\text{N}-\text{NR}_f + \text{POCl}_3$; X
(b) when oxidizing hydrazo compounds containing R_fNH groups: (R_f-CP_3 ,
 CF_2H , and others); these compounds are synthesized by reducing azoxy
compounds. Among others, the following were used as oxidizers of hydrazo
derivatives: Cl_2 , Br_2 , nitric oxides, chromate mixtures, potassium
permanganate in acetic acid; (c) when fluorinating linear or cyclic

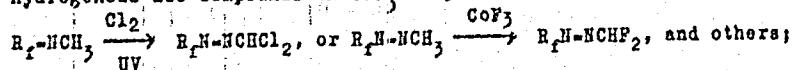
Card 1/5

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B103/B110

Production, pyrolysis, and ...

azines by CoF_3 in a carbon fluoride medium at $90\text{-}120^\circ\text{C}$, or by elementary F (diluted with N_2) at -10°C ; (d) when fluorinating nitriles of polyfluoro carboxylic acids and HCN in the vapor phase on CoF_3 at $100\text{-}150^\circ\text{C}$. Some PFAA derivatives were synthesized: (e) by chlorinating in the vapor phase in ultraviolet light (UV) at 300°C , or by fluorinating hydrogenous azo compounds on CoF_3 at $50\text{-}80^\circ\text{C}$:



(f) by the usual conversion of functional groups. The initial azo compounds used in reactions (e) and (f) were obtained by condensation of polyfluorinated nitroso alkanes with the corresponding amines. The constants of the substances obtained are tabulated. PFAA are yellow liquids or gases which explode when heated, but are much more stable than their non-fluorine-containing analogs. Pyrolysis: It was found that hexafluoro azo methane was slowly pyrolyzed in a copper tube at 400°C : $\text{CF}_3\text{N=NCF}_3 \longrightarrow \text{N}_2 + \text{CF}_3 - \text{CF}_3$. Similarly polyfluorinated homologs of hexafluoro azo methane also decompose. This decomposition can be used as a method of synthesizing PFAA. At $600\text{-}700^\circ\text{C}$, tetrafluoro methane, tetra-

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Production, pyrolysis, and ...

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2

fluoro ethylene, and lamp black are formed among others. This suggests the thermal decomposition of intermediate forming trifluoro methyl radicals. The low temperature coefficient, $E_{act} = \sim 5$ kcal/mole, proves the chain radical nature of the decomposing reaction in a high concentration of azo compounds. The free radical nature of the PFAA decomposition was also proved in their photolysis in UV; hexafluoro azo methane decomposes to form perfluoro tetramethyl, perfluoro hexamethyl hydrazine, and perfluoro hexazethyl tetrazine. Polyfluorinated hexaalkyl tetrazines are stable and do not decompose below 350-400°C:
 $(CF_3)_2N\cdot N(CF_3)\cdot N(CF_3)_2 \rightarrow (CF_3)_2N\cdot N(CF_3)_2 + CF_3N\cdot NCF_3$. When photolyzing trifluoro and pentafluoro azo methane, substituted hydrazines and tetrazines were isolated. Due to a mass-spectrometric investigation carried out by S. S. Dubov and A. M. Khokhlova, and due to chemical conversions, it was proved that the active free radical in asymmetrical azo compounds of the $CF_3N\cdot NR$ type was predominantly accumulated on the N atom of the azo group next to the less electrophilic group. The free radical nature of the above PFAA conversions is proved by their reaction

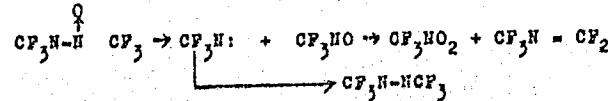
Card 3/5

32819
S/020/62/142/001/017/021
B103/B110

Production, pyrolysis, and ...

in UV in the presence of acceptors of free radicals. Thus, hexafluoro azo methane, in the presence of chlorine, changes into trifluoro chloro methane, when photolyzed, and into trifluoro nitroso methane in the presence of nitric oxide or methyl nitrite. The aliphatic-aromatic azo compounds of the $R_fN-NC_6H_5$ type are resistant to high temperatures and UV.

Thus, PFMA show a general tendency toward homolytic dissociation into free polyfluorinated radicals and into an N_2 molecule. Thus, N_2^+ is produced in the case of an electronic impact. Pyrolytic decomposition of hexafluoro azoxy methane at 250-300°, however, takes a different course:



There are 2 tables and 5 references: 1 Soviet and 4 non-Soviet. The three references to English-language publications read as follows:
Ref. 3: D. Clark, H. O. Pritchard, J. Chem. Soc., 1956, 2136; Ref. 4: J. R. Dacey, D. M. Young, J. Chem. Phys., 23, 1302 (1955); Ref. 5: J. O. Card 4/5

Production, pyrolysis, and ...

32819
S/020/62/142/001/017/021
B103/B110

Pritchard, H. O. Pritchard, A. F. Trotman-Dickenson, Chem. and Ind., 1955,
564; Trans. Farad. Soc., 52, No. 6 (1956).

PRESENTED: June 1, 1961, by Academician I. L. Knunyants and M. I.
Kabachnik

SUBMITTED: June 1, 1961

Card 5/5

GINSBURG, V.A.; YAKUBOVICH, A.Ya.; FILATOV, A.S.; ZELENIN, G.Ye.;
MAKAROV, S.P.; SHPANSKIY, V.A.; KOTEL'NIKOVA, G.P.;
SERGIYENKO, L.F.; MARTYNNOVA, L.L.

Heterolytic transformations of polyfluorinated azo alkanes.
Dokl. AN SSSR 142 no.2:354-357 Ja '62. (MIRA 15:2)

1. Predstavleno akademikami I.L.Knumyantsem i M.I.Kabachnikom.
(Azo compounds)
(Fluorine compounds)

GINSBURG, V.A.; YAKUBOVICH, A.Ya.; FILATOV, A.S.; SHPANSKIY, V.A.;
VLASOVA, Ye.S.; ZELENIN, G.Ye.; SERGIYENKO, L.F.; MARTYNNOVA, L.L.;
MAKAROV, S.P.

Production, pyrolysis, and photolysis of polyfluorinated azo
compounds of the aliphatic series. Dokl. AN SSSR 142 no.1:88-91
Ja '62. (MIRA 14:12)

1. Predstavleno akademikami I.L. Knunyantsem i M.I. Kabachnikom.
(Azo compounds) (Fluorination)

ZELENIN, G. Ye.

32839

5

S:3610 2209

S/020/62/142/002/020/029
B106/B101

11.2214

AUTHORS: Ginsburg, V. A., Yakubovich, A. Ya., Filatov, A. S., Zelenin,
G. Ye., Makarov, S. P., Shpanskiy, V. A., Kotel'nikova, G.
P., Sergiyenko, L. F., and Martynova, L. L.

TITLE: Heterolytic transformations of polyfluorinated azoalkanes

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 142, no. 2, 1962, 354-357

TEXT: A number of heterolytic transformations of polyfluorinated azoalkanes was discovered for the first time. The said azoalkanes, while being highly resistant to oxidizing agents, easily react with reducers (HI, H₂S, H₃P) in polar media (ether, methanol) at low temperatures, whereby the azo group is converted into the hydrazo group. Hexafluoro hydrazomethane presents acid properties and is relatively stable in the solvate form in ether or acetone. The etherate reacts with ketene, and the normal diacyl derivative is formed as a result. Hydrogen fluoride is readily separated from hexafluoro hydrazomethane under the action of bases:

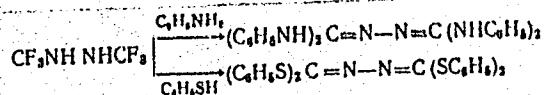
Card 1/15

32839

S/020/62/142/002/020/029

B106/B101

Heterolytic transformations of...



Hexafluoro hydrazomethane reacts with aluminum chloride to form the dimer of tetrafluoro formazine, and, if oxidized in anhydrous media ($\text{KMnO}_4 + \text{CH}_3\text{COOH}$), it passes over to the intensively yellow cis-form of hexafluorazo methane, which readily takes the almost colorless trans-form under the action of light, alkali lyes, or metals. In the reduction of azoalkanes which contain the groups CF_2Cl or R_fCF_2 , the corresponding hydrazo compounds cannot be isolated, due to hydrolysis. The compound $\text{CF}_3\text{NNHC}_6\text{H}_5$ can be distilled in vacuo (b.p. $56^\circ\text{C}/1\text{ mm Hg}$), and passes over to indazole under the action of hydrogen iodide. Under the action of strong acids, the azo group of polyfluorazo alkanes is able to add one proton which, in the case of asymmetric azoalkanes, is added to the nitrogen atom adjoining the more electronegative substituent. These reactions take place most readily in anhydrous hydrofluoric acid, whereby polyfluorazo alkanes are dimerized into benzidine derivatives. Poly-

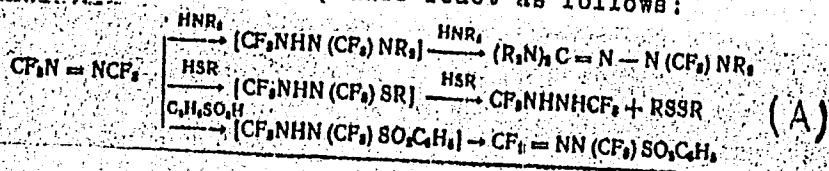
Card 2/3

32839

S/020/62/142/002/020/029
B106/B101

Heterolytic transformations of...

fluorinated azo compounds are particularly sensitive to nucleophilic reagents. The reaction rate with amines grows with the amine basicity, and the reactivity in azo compounds of the type $\text{CF}_3\text{N}-\text{NR}$ drops in the sequence $\text{R}-\text{CF}_3 > \text{CF}_2\text{H} > \text{CH}_3$. With secondary amines, mercaptans, and sulfinic acids, the azo compounds react as follows:



These conversions probably begin with the formation of a transition complex of the type of a π -complex, e. g., $\text{CF}_3\overset{3}{\underset{3}{\text{N}}}=\text{NCF}_3$. This assumption is backed by the fact that the transition complex, in the reaction of hexafluorazo methane with trialkyl phosphites, can be isolated under mild

Card 3/7

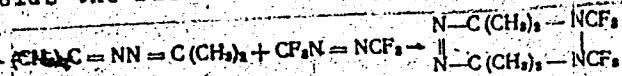
32839

S/020/62/142/002/020/029

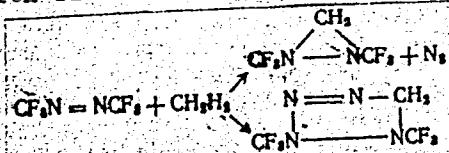
B106/B101

Heterolytic transformations of...

conditions (cooling with dry ice). On heating, the adduct decomposes to nitrogen, tetrafluoro ethylene, diethyl ether, ethyl fluoride, diethyl fluoro phosphite, and diethyl ethane phosphinate. In analogy to azodicarboxylic acid esters, hexafluorazo methane with dienes readily yields the Diels-Alder addition, reacts with azines according to the scheme



and with diazomethane as follows:



Hexafluorazo methane reacts smoothly with organo-magnesium compounds at low temperatures and forms the hitherto unknown acid fluorides of

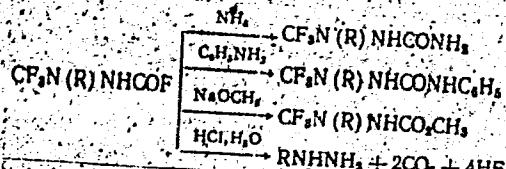
Card 4/15

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S/020/62/142/002/020/029
B106/B101

5

Heterolytic transformations of...

polyfluoro alkyl-(aryl)-hydrazine carboxylic acids $\text{CF}_3\text{N}(\text{R})\text{NHCOF}$, from which a number of further derivatives was obtained:

There are 1 table and 3 references: 2 Soviet and 1 non-Soviet.

PRESENTED: June 1, 1961, by I. L. Knunyants, Academician, and M. I. Kabachnik, Academician

SUBMITTED: June 1, 1961

Table 1. Compounds synthesized for the first time.

Legend: (a) compound; (b) boiling point; (c) melting point; (d) does not melt below 300°C.

Card 5/15

GINSBURG, V.A.; ZELENIN, G.Ye.; DUBOV, S.S.; MAKAROV, S.P.; YAKUBOVICH,
A.Ya.

Synthesis of esters of thioazocarboxylic acids. Zhur. ob. khim.
30 no.8:2689-2692 Ag '60. (MIRA 13:8)
(Azo compounds) (Acids)

ZELENIN, I. Kh.

AUTHOR: Zelenin, I.Kh. 132-58-2-7/17

TITLE: Results of the Exact Timing of Drilling Operations (Rezul'taty khronometrazha burovych rabot)

PERIODICAL: Razvedka i Okhrana Nedr, 1958, Nr 2, pp 24-27 (USSR)

ABSTRACT: The deliveries of new equipment and instruments to geological prospecting and exploratory teams necessitate a complete revision of the norms for all kinds of drilling operations, the old ones being out of date. There are 5 tables.

Card 1/1 1. Drilling-Standards-Revisions

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964220018-8

ZELENIN, I.Kh.

~~SECRET~~
Improve the quality of boring shot. Resved. i okh.nedr 21 no.3:
30-36 My-Je '55. (MLRA 9:12)

(Boring)

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964220018-8"

ZELENIN, I. Kh.

"Experience Gained in the Preparation of Steel Shot (Networks),"
Razvedka i Ohrana Nedr, No. 3, pp 22-27, 1954

SO: W-31429, 2 Sep 55

IOFFE, B.V.; ZELENIN, K.N.

New rearrangement of hydrazine derivatives. Synthesis of β -dialky-laminopropionitriles from unsymmetrical dialkylhydrazines and acrolein. Dokl. AN SSSR 134 no.5:1094-1097 O '60. (MIRA 13:10)

1. Leningradskiy gosudarstvennyy universitet im. A.A.Zhdanova.
Predstavлено академиком А.Н.Несмеяновым.
(Propionitrile) (Hydrazine) (Acrolein)

TEL'PUKHOVSKIY, V.B.; DMITRENKO, T.A.; ZELENIN, I.Ye.; KOSTYAKOVA, G.K.;
RAKHMIN, B.P.; BORISOV, Yu.S., otv. red.; KRUCHINA, N.Ye., red.;
FEDOROV, A.G., red.; LYUBUSHKINA, Ye., red.; YEGOROVA, I., tekhn.
red.

[In the land of wide-open spaces and heroic deeds; youth in the
virgin lands] V kraiu prostorov i podvigov; molodezh na tseline.
Sbornik dokumentov. Moskva, Izd-vo TsK VLKSM "Molodaia gvardiya,"
1962. 278 p. (MIRA 15:5)

(Agricultural laborers)

S/020/60/134/005/013/023
B016/B054

AUTHORS: Ioffe, B. V. and Zelenin, K. N.

TITLE: New Regrouping of Hydrazine Derivatives, Production of
 β -Dialkylamino Propionitriles/From Asymmetrical Dialkyl
Hydrazines/and Acrolein/

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 134, No. 5,
pp. 1094-1097

TEXT: The authors tried to synthesize the hitherto unknown unsaturated hydrazones by condensing asymmetrical dialkyl hydrazines with acrolein, and observed a regrouping of a new type with simultaneous formation of β -dialkylamino propionitriles (see Diagram). This reaction was carried out with dimethyl hydrazine (yield of the final product: 68%) and diethyl hydrazine (yield: 56%). The new regrouping is characterized by the rupture of the nitrogen-nitrogen bond under very mild conditions, i.e., with addition of acrolein to the aqueous solution of the hydrazine salt in the cold, in a weakly acid medium. When acrolein is added to free dimethyl hydrazine (i.e., in an alkaline medium), a water-soluble, highly

Card 1/3

New Regrouping of Hydrazine Derivatives.
Production of β -Dialkylamino Propionitriles
From Asymmetrical Dialkyl Hydrazines and
Acrolein.

S/020/60/134/005/013/025

B016/B054

molecular substance is formed, which has not yet been investigated in detail. When dimethyl hydrazine was added to acrolein, a violent explosion took place, probably due to a spontaneous polymerization of acrolein. As yet, regroupings with a rupture of the N—N bond and the formation of new N-C bonds have only been found in the aromatic series. Apparently, the reaction with acrolein proceeds via the formation of unsaturated hydrazones: $\text{CH}_2=\text{CH}-\text{CH}=\text{N}-\text{NR}_2$, which in a weakly acid medium are

immediately regrouped to aminonitriles. The only known case of nitrile formation from hydrazine derivatives is the catalytic decomposition of aldehyde phenyl hydrazones into nitriles and aniline at about 200°C, i.e., under much harder conditions (discovered by A. Ye. Arbuzov, Ref. 1). The β -dialkylamino propionitriles produced by the authors as described above have hitherto been synthesized by cyanoethylation of secondary amines. They are of practical importance as starting material for the production of physiologically active preparations and detergents. For a reliable identification of the final products obtained, the authors made

Card 2/3

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964220018-8

TOPIC TAGS: azafluorescein, synthesis, dyes, azafluorescein, synthesis, dyes.

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964220018-8"

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964220018-8

ASSOCIATION: None

Card 1/3

APPROVED FOR RELEASE: 03/15/2001

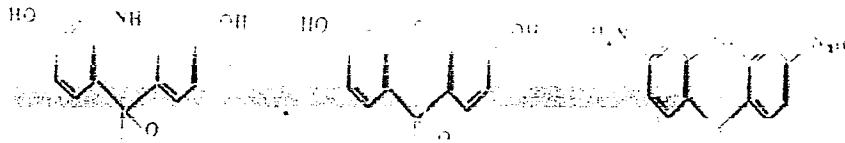
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"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964220018-8

ACCESSION NR: AF4044199

ENCL: 01



APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001964220018-8"

IOFFE, B.V.; ZELENIN, K.N.

Hofmann degradation of the pyrazoline ring. Dokl. AN SSSR
154 no.4:864-867 F '64.
(MIRA 17:3)

1. Leningradskiy gosudarstvennyy universitet im. A.A. Zhdanova.
Predstavлено akademikom B.A. Kazanskim.

IOFFE, B.V.; ZELENIN, K.N.

Condensation of methoxy amine with acrolein and methacrolein. Izv.-
vys.ucheb.zav.;khim.i khim.tekh. 6 no.1:78-82 '63. (MIRA 16:6)

1. Leningradskiy gosudarstvennyj universitet imeni Zhdanova, kafedra
organicheeskoy khimii.
(Amines) (Acrolein) (Methacrylaldehyde)

IOFFE, B.V.; ZELENIN, K.N.

Mechanism of amino nitrile rearrangement. Dokl. AN SSSR. 1962 no.6:
1303-1306 Je '62. (MIRA 15:6)

1. Leningradskiy gosudarstvennyy universitet im. A.A. Zhdanova.
Predstavлено akad. A.N.Nesmeyanovym.
(Nitriles)

IOFFE, B.V.; ZELENIN, K.N.

Amino nitrile rearrangement. Zhur. ob. khim. 32 no.5:1708-1709
My '62. (MIRA 15:5)

1. Leningradskiy gosudarstvennyy universitet.
(Nitriles) (Rearrangements (Chemistry))

IOFFE, B.V.; ZELENIN, K.N.

Simplest unsaturated dialkylhydrazones. Dokl. AN SSSR 141 no.6:
1369-1372 D '61. (MIRA 14:12)

1. Leningradskiy gosudarstvenny universitet im. A.A.Zhdanova.
Predstavлено akademikom A.N.Nesmeyanovym.
(Hydrazone)

ARKHIPOVICH, N.A.; ZELENINA, L.M.; KVITA, S.N.

Titration method for the control of the work of settlers and mud
thickeners. Sakh.prom. 37 no.9:44-45 S '63. (MIRA 16:9)
(Sugar manufacture)

ARKHIPOVICH, N.A.; ZELEMINA, L.M.; KVITA, S.N.

Determining the natural alkalinity of the first carbonation
juice. Sakh.prom. 37 no.9:42-44 S '63. (MIRA 16:9)

1. Kiyevskiy tekhnologicheskiy institut pishchevoy promyshlen-
nosti imeni Mikoyana.
(Sugar manufacture)

ACC NR: AP6036903

SOURCE CODE: UR/0226/66/000/011/0066/0071

AUTHOR: Zelenin, L. P.; Radovskiy, I. Z.; Sidorenko, F. A.; Gel'd, P. V.
Rabinovich, B. S.

ORG: Ural Polytechnic Institute im. S. M. Kirov (Ural'skiy politekhnicheskiy
institut)

TITLE: Structural peculiarities of solid solutions of chromium dicilicide with
vanadium and titanium dicilicides

SOURCE: Poroshkovaya metallurgiya, no. 11, 1966, 66-71

TOPIC TAGS: disilicide, solid solution, chromium vandium alloy, titanium solid
solution, vanadium solid solution, vanadium disilicide, titanium disilicide,
chromium disilicide

ABSTRACT: An analysis was made of the region of solubility for vanadium and
titanium bisilicides in chromium bisilicide. It is shown that the chromium and
titanium bicilicides possess an inorganic mutual solubility in the solid state, while
the solubility of $TiSi_2$ in $CrSi_2$ exceeds 80 mol%. It is also established that the
solid solutions of VSi_2 and $TiSi_2$ in $CrSi_2$ have complete crystal lattices of the
Card 1/2

ACC NR: AP6036903

C-40 type, with three metal atoms and six atoms of silicon in unit cell. The volume of the unit cells increases with the increase of vanadium and titanium contents in the alloys. The imperfection of the solid solutions is noted and a hypothesis of its causes is given. Orig. art. has: 3 figures and 2 tables.

[NT]

SUB CODE: 11/SUBM DATE: 10Nov65/ORIG REF: 006/OTH REF: 003/

Card 2/2

ACCESSION NR: AP4029537

8/0149/64/000/002/0146/0151

AUTHOR: Zelenin, L. P.; Sidorenko, F. A.; Gel'd, P. V.TITLE: Structural characteristics of the ϵ -phase of the Co-Si system

SOURCE: IVUZ. Tsvetnaya metallurgiya, no. 2, 1964, 146-151

TOPIC TAGS: cobalt, silicon, ϵ -phase, silicide, metallographic investigation, x-ray investigation, densitometric investigation.

ABSTRACT: In this paper the authors studied the concentration limits of stability of single-phase monosilicide and the character of filling its crystalline lattice with component atoms. Microphotographs of Co-Si alloys with various silicon contents are presented. The authors found that by metallographic, x-ray, and densitometric methods, the width of the homogeneity region of ϵ -phase of the Co-Si system at 800-1100° (31.40-32.80% Si) and at 1200° (30.96-33.06 Si) is more accurately defined. It is shown that when $n_{Si} > n_{Co}$, cobalt monosilicide, it is a solid solution of substitution in the cobalt sublattice. The maximum defectiveness for an alloy saturated with silicon at 1100° reaches 2%. When $n_{Si} < n_{Co}$, a substitution of silicon atoms by cobalt atoms occurs which is accompanied by formation of the small amount of defects in the silicon sublattice. Equiatomic cobalt monosilicide is characterized

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ACCESSION NR: AP4029537

by a period of identity $a = 4.4445 \pm 0.0010 \text{ \AA}$, a density $\rho = 6.58 \pm 0.003 \text{ g/cm}^3$, a microhardness $H = 840 \text{ kg/mm}^2$ and a thermal emf $\alpha_{20-120} = 83 \mu\text{v}/\text{degree}$. Orig. art. has: 3 figures and 1 table.

ASSOCIATION: Ural'skiy politekhnicheskiy institut (Ural Polytechnical Institute)

SUBMITTED: 178ep63

DATE ACQ: 30Apr64

ENCL: 00

SUB CODE: ML

NO REF Sov: 003

OTHER: 004

Card 2/2

RYBALKO, F.P.; KOSTENKO, A.V.; ZELENIN, L.P.

Effect of tension on plasticity in deformations effected by alternating torsion. Izv.vys.ucheb.zav.; fiz. no.1:24-30 '61. (MIRA 14:7)

1. Ural'skiy gosudarstvennyy universitet imeni A.M.Gor'kogo.
(Plasticity) (Deformations(Mechanics)) (Torsion)

RYBALKO, F.P.; ZELENIN, L.P.; GUSEV, G.V.; SHEVCHENKO, R.I.

Dependence of the nonrecovery of plastic deformation on the
degree of the macroscopic inhomogeneity of its distribution.
Izv. vys. ucheb. zav.; fiz. & no.6:125-129 '65.

(MIRA 19:1)

1. Ural'skiy gosudarstvennyy universitet imeni A.M. Gor'kogo.
Submitted September 26, 1963.

ZELENIN, Eng. M.A.

Decoration and Ornament--Architectural

Ceramics in decorative work of the Moscow subway stations. Biul. stroi.tekh. 9 No.16 1952

Monthly List of Russian Accessions Library of Congress November 1951 Unclassified

ZELENIN, N.A., ENG.

Moscow--Subways

Ceramics in decorative work of the Moscow subway stations. Biul. stroi.tekh. 9 No.16 1952

Monthly List of Russian Accessions, Library of Congress, November, 1952 Unclassified

ZELENIN, M.A. Eng.

Subways--Moscow

Ceramics in decorative work of the Moscow subway stations. Buil.stroi. tekhn. 9 No. 16 1952

Monthly List of Russian Accessions, Library of Congress. November, 1952 Unclassified

ZELENIN, M.A., glavnnyy arkhitektor.

Architecture of the Metro stations on the first section of the Great Circle.
Gor.khoz.Mosk. 21 no.4:4-14 Ap '47. (MLRA 6:11)

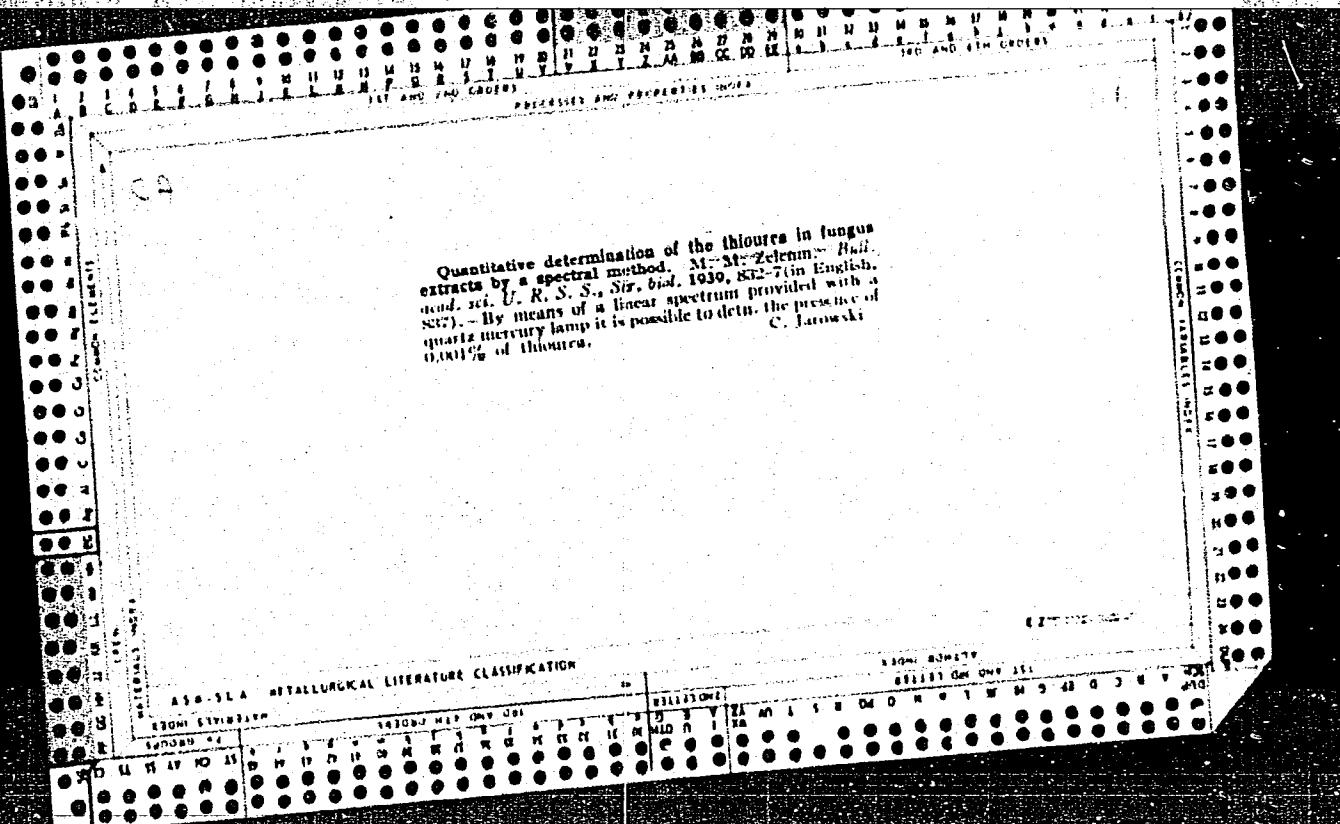
I. Stroitel'stvo moskovskoy podzemnoy zheleznoy dorogi.
(Moscow--Subways) (Subways--Moscow)

KROPACHEV, V.A.; DOLGOPLOSK, B.A.; GILLER, N.M.; ZELENINA, M.N.

Reactions of organometallic compounds with heavy metal salts.

Report No.2: Reactions of ethyllithium with cobalt and
titanium halides. Izv.AN SSSR.Otd.khim.nauk no.6;1044-1048
J1 '60. (MIRA 13:7)

1. Institut vysokomolekulyarnykh soyedineniy Akademii nauk SSSR.
(Lithium) (Cobalt halides) (Titanium halides)



USSR/Cultivated Plants - Commercial. Oil-Bearing. Sugar-Bearing. M.

Abs Jour : Ref Zhar - Biol., No 10, 1958, 44192

Author : Zelenin, N.

Inst :

Title : On the Effectiveness of Applying Ammonized Superphosphate to Cotton.

Orig Pub : Kirovogradstvo, 1957, No 8, 24-26.

Abstract : In the field experiments under the conditions of the collective farms of the Tashkentskaya Oblast in 1954-1956 it was established by the Central Station of Fertilizers and of Soil Science of the All-Union Cotton Institute that the ammonized superphosphate of the Kokanda plant prepared from the phosphorites of Kara-Tau was more effective when placed under the basic plowed layer and during the vegetation period than the ordinary superphosphate of the same plant (the average crop increase comprised 2.5 centners/ha). It is pointed out that the ammonized superphosphate

Card 1/2

USSR/Cultivated Plants - Commercial, Oil-Bearing, Suggr-Bearin.; M.

Abs Jour : Ref Zhar - Biol., No 10, 1958, 44192

has good physical properties and that it can be spread evenly with the available machines. -- A.M. Smirnov

Card 2/2

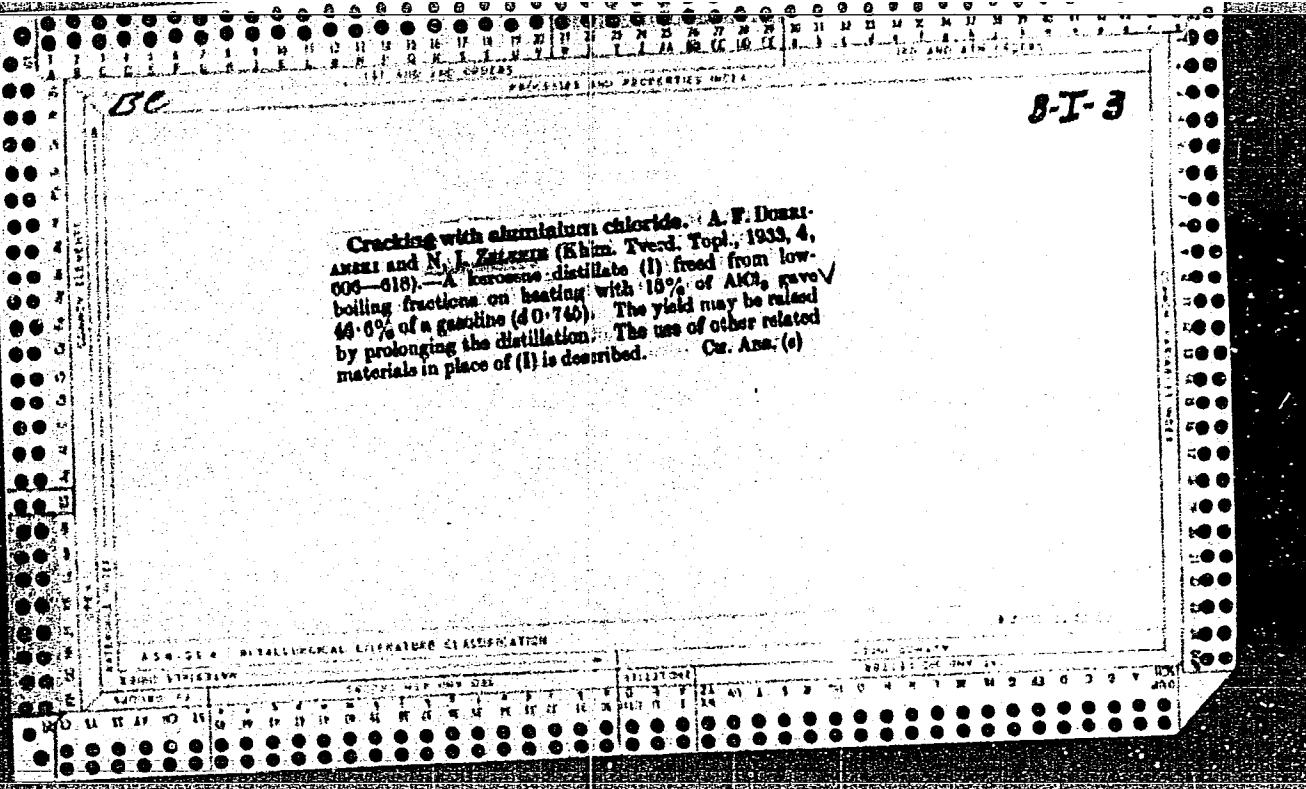
- 106 -

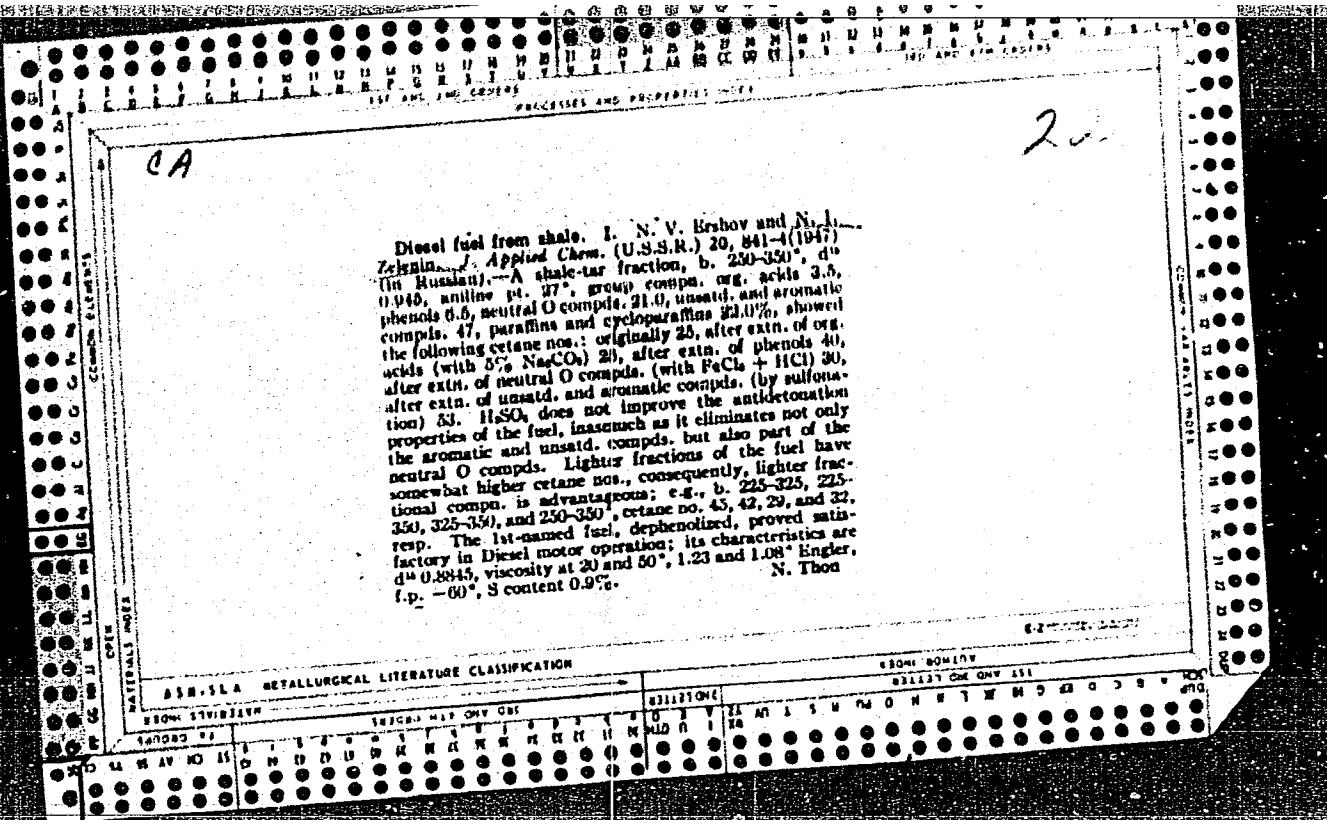
ZELENIN, N., KOSHELEVA, A., KOZHEVNIKOV, N.

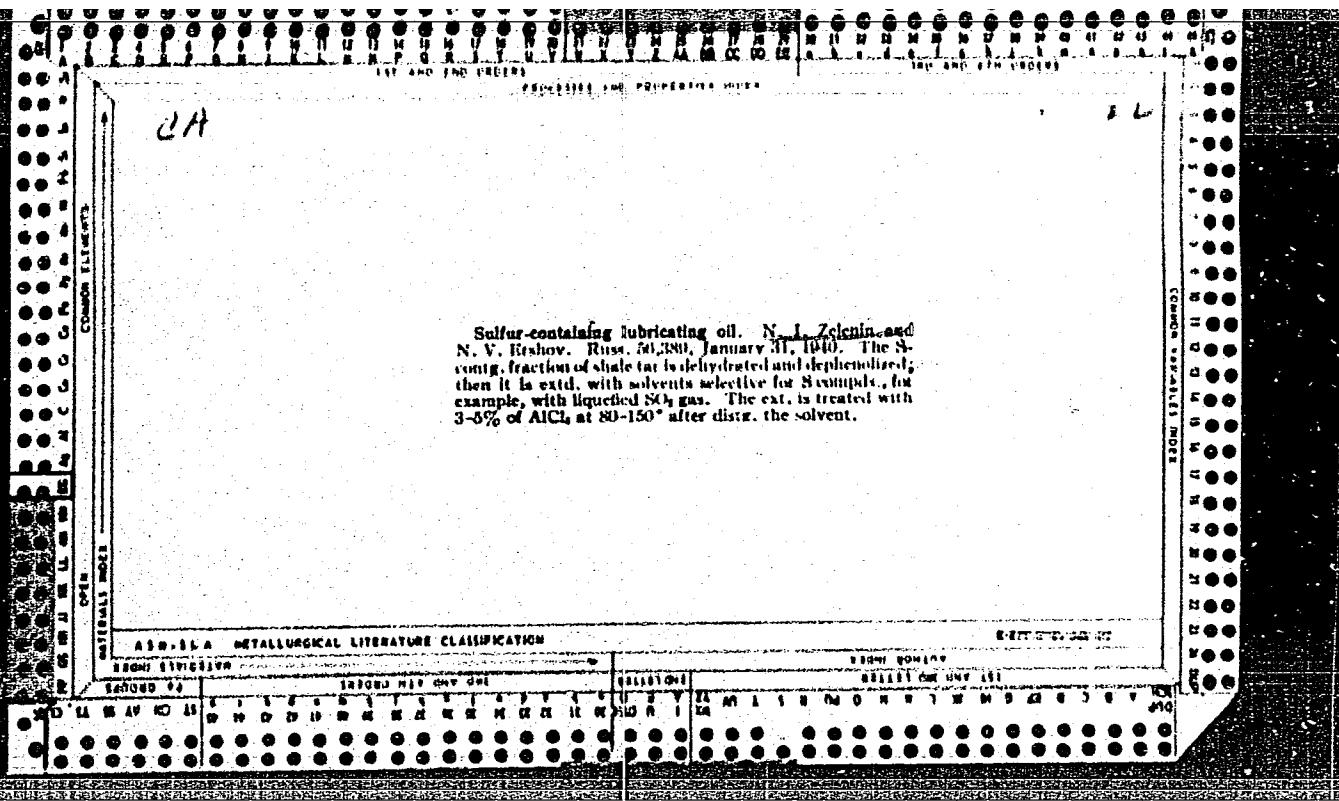
Vydeleniye Serovedoruda Iz Slantsevogo Shvel'gaza Stanolaminami, Goryuchiye
Slantsy, 1934, No 5, 52

SO:

Goryuchiye Slantsy // 1934-35, TM .871
G .74







3913. Shale-oil diesel fuel. I. Ershov, N.V. and Zelenin, N.I. (naukova prikladnoe Khimii (J. Appl. Chem.), Sept. 1947, vol. 20, 841-844).

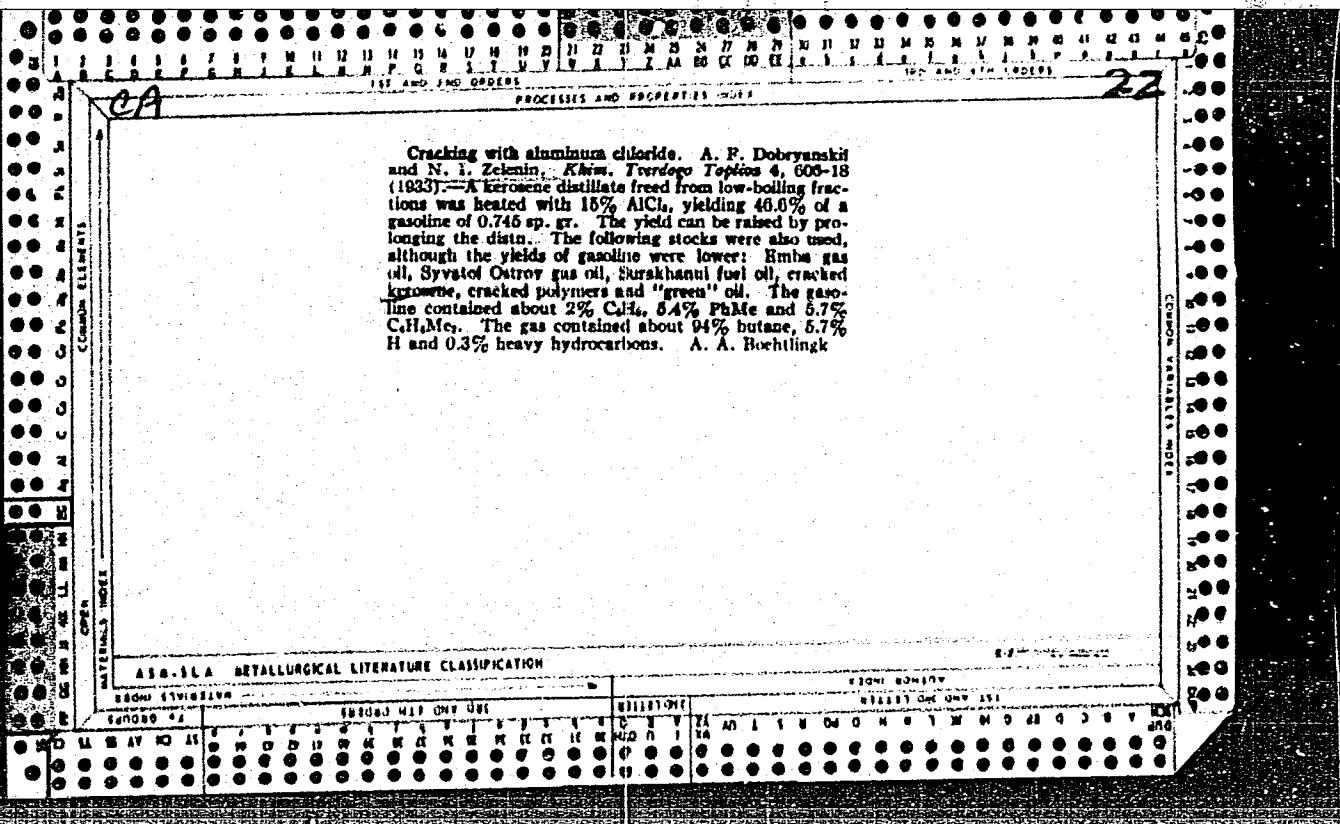
The composition of the above was investigated, compounds of high and low reactivity toward known being identified. A fraction from 225° to 325°C., from which phenolic compounds were removed, was shown to be most suitable, both in the laboratory and in practice.

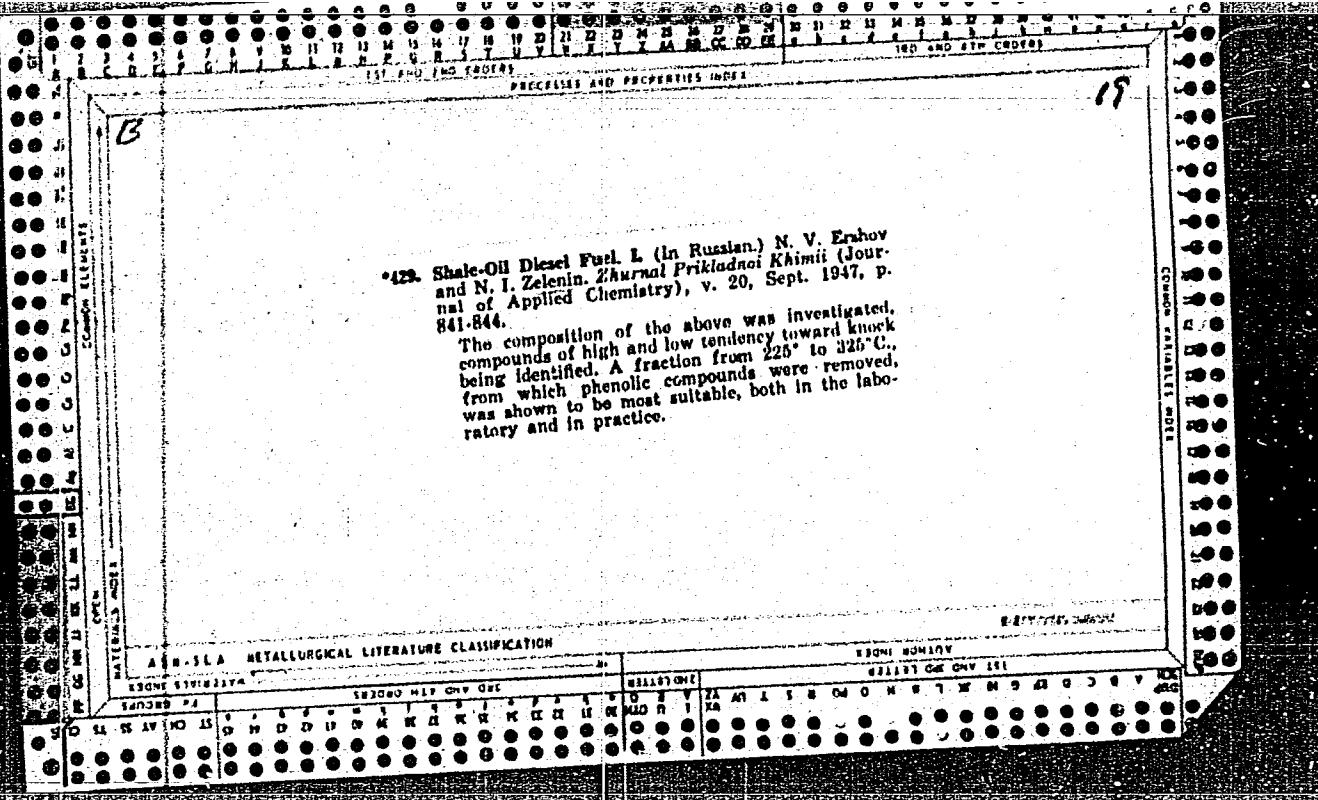
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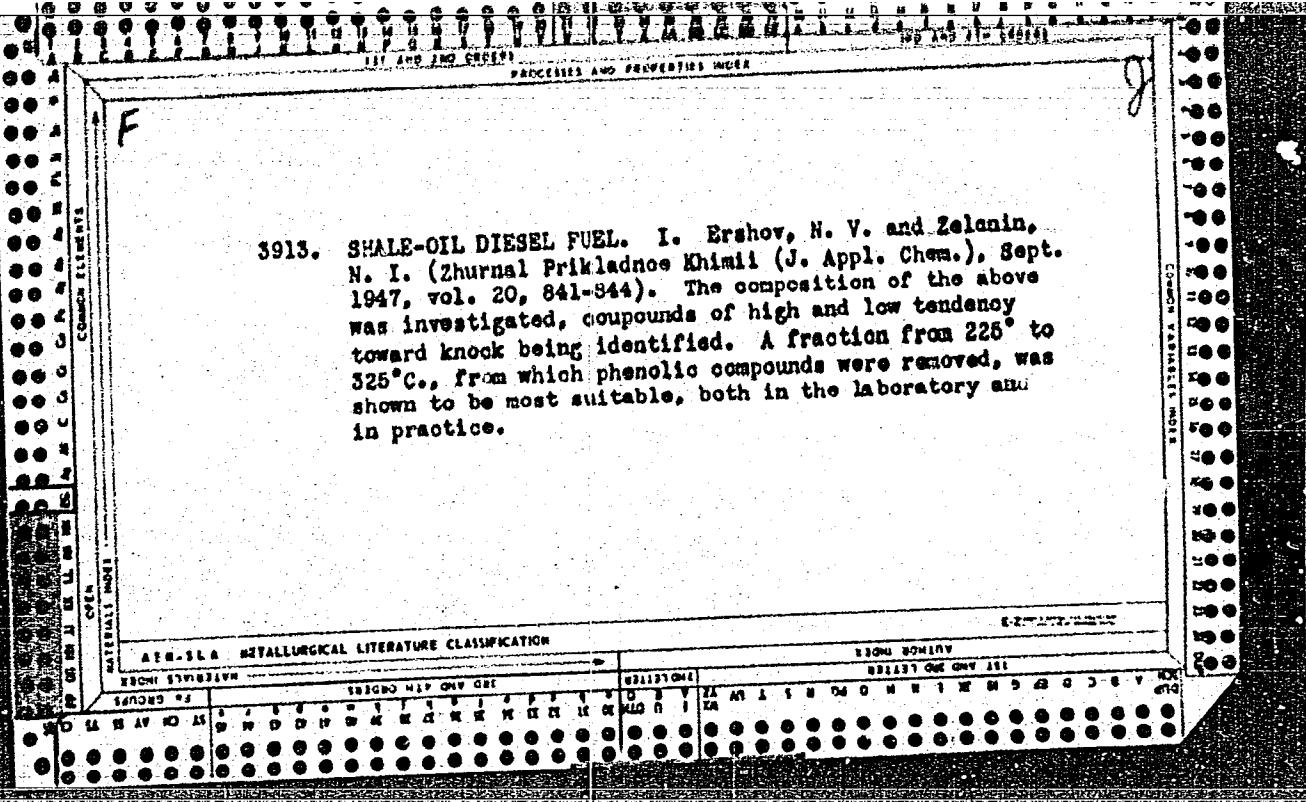
Eg. Ab.

*BI-2, solid > gaseous
fuel*

Diesel oil from shale. N. V. Rishov and N. I. Zel'skin (*I. sput.*
Chim., USSR, 1947, **30**, 841-844).—Antidetonating properties
are associated with the neutral O-containing constituents of shale
oil and with the saturated and naphthenic hydrocarbon fractions.
Phenols greatly lower the cetane no., and should be eliminated.
Good-performance oil contains no phenols, and has a S content of
0.9%, I.p. below -60°, b.p. 223-225°, flash point 100°, $\eta^{\text{d}} 0.8845$,
 $\eta^{\text{d}} 1.23$, $\eta^{\text{d}} 1.08$.
R. Tauscon.







ZELENIN, N.I.; CHERNYSHEVA, K.B.; TATARINA, G.V.; FAYNBERG, V.S.;
YANKOVSKAYA, T.A.

Developing the method of cold fractionation of shale tar.

Report No.4: Cold fractionation as a method for tar
preparation. Knin. i tekhn. gor. slan. i prod. ikh perer
no.13:312-318 '64. (MERA 18:9)

ZELENIN, N.I.; RUDKOVSKIY, D.M.; CHERNYSHEVA, K.B.; NATAROV, V.F.;
TATARKINA, G.V.

Prospects for the oxosynthesis process based on shale olefins.
Khim. i tekh. gor. slan. i prod. ikh perer no.13:325-332 '64.
(MIRA 18:9)

ZABRODKIN, A.G.; ZELENIN, N.I.; LIYEVA, V.Yu.; FEOLILOV, Ye.Ye.;
VASIL'YEV, M.L.

Plane tests of synthetic adhesives on a base of shale phenols
boiling at temperature up to 300°. Khim. i tekhn. gor. slan.
i prod. ikh perer. no.10:246-252 '62.

(MIRA 17:5)

Plant tests of synthetic adhesives on a base of shale tar
phenols combined with tricresol and boiled away at
temperature above 300°. Ibid.:253-256

ZELENIN, N.I.; FEOLILOV, Ye.Ye.

Potential and actual phenol yields from oil shale tars. Khim.
i tekhn. gor. slan. i prod. ikh perer. no.10:139-152 '62.
(MIRA 17:5)

ZELENIN, N.I.; FEOLILOV, Ye.Ye.; RED'KIN, V.A.

Optimal variation in the technological system of refining
oil shale tar. Khim. i tekhn. gor. slan. i prod. ikh perer.
no.10:152-163 '62. (MIRA 17:5)