

L 16576-66

ACC NR: AP6006960

SUB CODE: 14, 20/ SUBM DATE: 02Dec64/ ORIG REF: 007/ OTH REF: 002/

Card 2/2 SM

5(3)

AUTHORS:

Kazanskiy, B. A., Academician, SOV/20-122-6-19/49  
Lieberman, A. L., Tyun'kina, N. I., Kuznetsova, I. M.

TITLE:

On the Limited Applicability of the Auwers-Skita Rule in  
Stereoisomeric Dialkyl Cyclanes (Ob ogranichennoy primenimosti  
pravila Auversa-Skita k stereoizomernym dialkiltsiklanam)

PERIODICAL:

Doklady Akademii nauk SSSR, 1958, Vol 122, Nr 6,  
pp 1025-1028 (USSR)

ABSTRACT:

In recent years it was repeatedly noticed that the rule mentioned in the title cannot be applied to 1,3-dialkyl cyclopentanes and 1,3-dialkyl cyclohexanes. In these latter series the interrelation of the properties of cis-and trans-isomers is reversed. By the example of the stereoisomeric 1,3-dimethyl cyclopentanes and 1,3-dimethyl cyclohexanes this statement was confirmed by thermodynamic data as well as by synthesis. Recently the authors have observed such a case in which a peculiar deviation from the same rule took place (Ref 1) in the 1,4-dialkyl cyclohexane series. In this series the applicability of the rule under consideration was denied by nobody. It became evident that in the case of the

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On the Limited Applicability of the Auwers-Skita  
Rule in Stereoisomeric Dialkyl Cyclanes

SOV/20-122-6-19/49

stereoisomeric 1,4-diisopropyl cyclohexanes the specific weight and the refractive index are higher, the molecular refraction, however, and the melting temperature of the isomer boiling at a lower temperature are lower; the spectroscopic data have shown that the latter isomer is a cis-form. So in this case not the trans- but the cis-form has a lower boiling-point - contrary to the rule mentioned. The observations so far collected make it possible to approach the problem of the relations between the configuration and the physical constants by a new method; the applicability of the rule mentioned is not only restricted by the arrangement of the side chains in the dialkyl-cyclane molecule, but also by the atomic number of carbon in the latter. The authors believe that the deviation described above is a regular phenomenon. The reflections mentioned make it possible to conclude that stereoisomeric 1,4-dialkyl cyclohexanes with 12 or a few more carbon atoms in the molecule must, similar to 1,4-diisopropyl cyclohexane, deviate from the rule under consideration. Thus the Auwers-Skita rule is only applicable

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On the Limited Applicability of the Auwers-Skita  
Rule in Stereoisomeric Dialkyl Cyclanes

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to the first members of the series of the 1,4-dialkyl cyclohexanes. By studying own data and those mentioned in publications on boiling temperatures of the stereoisomeric dialkyl cyclanes it can be concluded that the linear character of the dependence between the differences in boiling temperature of the stereoisomers and the atomic number of carbon in the molecule is not confined to the 1,4-dimethyl cyclohexane series, but applies also for the 1,2-dialkyl cyclopentanes (Table 2 and line A of Fig 1). In the stereoisomeric 1,2-dialkyl cyclanes discussed here the boiling temperatures of the trans-form increase more rapidly with increasing molecular weight than in the cis-forms. In these cases, however, the Auwers-Skita rule must have a somewhat wider range of applicability than for 1,4-dialkyl cyclohexanes. There are 1 figure, 3 tables, and 10 references, 5 of which are Soviet.

## ASSOCIATION:

Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy, of the Academy of Sciences, USSR)

Card 3/4

LIBERMAN, A.L.; VASINA, T.V.; TYUN'KINA, N.I.

Relation of certain of the physical properties of stereoisomeric  
dialkylcyclohexanes to their structure and configuration.  
Neftekhimia 4 no.3:367-370 My-Je '64. (MIRA 18:2)

1. Institut organicheskoy khimii AN SSSR im. N.D.Zelinskogo.

KAZANSKIY, B.A., akademik; LIBERMAN, A.L.; TYUN'KINA, N.I.

Deviation of stereoisomeric 1,4-bis-tert. butylcyclohexanes from  
the Auwers-Skita rule. Dokl. AN SSSR 134 no.1:93-95 S '60.  
(MIRA 13:8)

1. Institut organicheskoy khimii im. N.D. Zelinskogo Akademii nauk  
SSSR.

(Cyclohexane)

UGRENINOVA, Ye.I.; TYUNINA, V.N.

Protein metabolism changes under the influence of therapy in patients with acute peritonsillitis. Trudy gos.nauch.-issl. inst.ukha, gorla i nosa. 6:103-111 '55. (MIRA 12:10)

1. Iz biokhimicheskoy laboratorii (zav. - kand.med.nauk Ye.I. Ugraninova) Gosudarstvennogo nauchno-issledovatel'skogo instituta ukha, gorla i nosa. (PROTEIN METABOLISM) (TONSILS--DISEASES)

T-YUN-KINA, N. I.

SOV. 30 7

21(0), 24(0) PHASE 2 BOOK EXPLOITATION Akademiya nauk SSSR. Fizicheskii institut

Issledovaniya po eksperimental'noy i teoreticheskoj fizike: [abornik] (Studies on Experimental and Theoretical Physics: Collection of Articles) Moscow, Izd-vo AN SSSR, 1959. 304 p. Errata slip inserted. 2,300 copies printed.

Ed. i. I. L. Fabelinskii, Doctor of Physical and Mathematical Sciences; Eds. of Publishing House: L. Chernyak and V. d. Bergaut, Tech. Ed.: Yu. V. Rylin; Commission for Publishing the Collection in Memory of Grigoriya Samuilovich Landsberg: I. Ye. Tamm (Chairman), Academician; L. A. Leontovich, Academician; F. A. Bazhulin, Doctor of Physical and Mathematical Sciences; S. L. Mandel'shtam, Doctor of Physical and Mathematical Sciences; I. L. Fabelinskii, Doctor of Physical and Mathematical Sciences; P. S. Landsberg, Academician; Candidate of Physical and Mathematical Sciences; and G. P. Kotulovich (Secretary), Candidate of Physical and Mathematical Sciences.

PURPOSE: This book is intended for physicists and researchers engaged in the study of electromagnetic radiation and their role in investigating the structure and composition of materials.

CONTENTS: The collection contains 30 articles which review investigations in spectroscopy, acoustics, molecular optics, semiconductor physics, nuclear physics, other branches of physics. The introductory chapter gives a biographical profile of G. S. Landsberg, Professor and Head of the Department of Optics of the Division of Physical Technology at Moscow University, and reviews his work in Rayleigh scattering, combat gases, spectral analysis of metals, etc. No personalities are mentioned. References accompany each article.

Bazhulin, F. A., Y. I. Malyshev, and M. M. Suschinskiy. The Work of G. S. Landsberg in the Field of Molecular Spectroscopy IV. Formation Processes in an Activated Discharge Generator Operating Under Conditions of Low Art Currents 27

Aleksandryan, Y. Z., Kh. Ye. Steclin, A. L. Liberman, I. M. Kurnetsov, M. I. Yumshakov, and B. A. Kazanskiy. The Possibility of Establishing the Configuration of Stereoisomeric Diastereocyclohexanes on the Basis of a Combined Scattering Spectrum 43

Andreyev, M. M. Standing Sound Waves of Large Amplitude 53

Bazhulin, F. A., and A. I. Sokolovskaya. Investigation of the Relation of the Width of Combined Scattering Lines to Temperature 56

Butayeva, F. A., and V. A. Zabludant. A Medium With Negative Absorption Coefficient 62

Vladimirov, V. V. Nuclear Transitions in Nonspherical Nuclei 71

Volkovskiy, M. V. Optical Properties of Substances in the Vitreous State 80

Vul, E. M., V. S. Vasilov, and A. P. Shotor. The Question of Impact Ionization in Semiconductors 95

Vul'fson, I. S. New Methods of Increasing the Effectiveness of Radiation Thermocouples 100

Ginzburg, V. L., and A. F. Levshinik. Scattering of Light Near Points of Phase Transition of the Second Type and the Critical Curie Point 104

Isakovich, M. A. Irradiation of an Elastic Wall Vibrating Under the Action of Statistically Distributed Forces 117

Levin, L. N. The Dimming of Light by a Cloud 121

Maring, M. A., S. L. Mandall'htan, and V. G. Kolosnikov. The Broadening and Shifting of the Spectral Lines of a Gas Discharge in Plasma 128

Malyshov, V. I., and V. M. Nutrin. Investigation of the Hydrogen Bond in Substances Whose Molecules Contain Two Hydroxyl Groups 131

5.3300

78080  
SOV/62-60-1-26/37

AUTHORS: Gostunskaya, I. V., ~~Tyun'kina, N. I.~~, Kazanskly, B. A.

TITLE: Brief Communications. Isomerization of Some Dienes in the Presence of Calcium Amide

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1960, No 1, pp 132-133 (USSR)

ABSTRACT: Isomerization of 1,5-hexadiene, 2-methyl-1,5-hexadiene, and 2,5-dimethyl-1,5-hexadiene in the presence of calcium amide at 70° in a flow system with a space velocity 0.2, was studied in order to find correlations between the structure of the investigated dienes and the rate of their isomerization. The data obtained were compared with those obtained by A. Henne and A. Turk (J. Am. Chem. Soc., 64, 826, 1942) using  $Al_2O_3$  as a catalyst, under identical conditions, at 365°. The data obtained show that there is not much difference in the rate of isomerization of different dienes with calcium amide, but there is a big difference in the

Cont 1/4

Brief Communications. Isomerization of Some  
Diene in the Presence of Calcium Amide

73000  
COV/62-80-1-16/37

Key: (a) Starting diene; (b) properties of diene; (c)  
bp in °C; (d) properties of products of catalysis; (e)  
degree of isomerization.

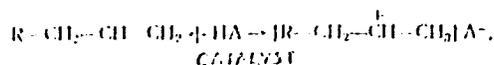
a	b		$n_D^{20}$	c		d	
	c	$n_D^{20}$		$n_D^{20}$	$n_D^{20}$	C <sub>10</sub> (NH <sub>2</sub> ) <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>
CH <sub>2</sub> =CH-CH <sub>2</sub> -CH=CH <sub>2</sub>	59,7	1,4038	0,6935	1,4388	0,7164	72	59
CH <sub>2</sub> =C-CH <sub>2</sub> -CH=CH <sub>2</sub>	88,1	1,4192	0,7190	1,4570	0,7314	77	58
$\begin{array}{c} \text{CH}_3 \\   \\ \text{CH}_2=\text{C}-\text{CH}_2-\text{CH}_2-\text{C}=\text{CH}_2 \\   \qquad \qquad \qquad   \\ \text{CH}_3 \qquad \qquad \qquad \text{CH}_3 \end{array}$	113,9	1,4299	0,7419	1,4714	0,7505	81	80

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Brief Communications. Isomerization of Some  
Dienes in the Presence of Calcium Amide

78080  
357/52-46-1-26/37

rate of isomerization of dienes with  $Al_2O_3$ . The above data confirm the generally accepted view that acid and basic catalysts have different mechanisms. Isomerization of olefins in the presence of an acid catalyst ( $Al_2O_3$ ) proceeds through the formation of intermediate carbonium ions:



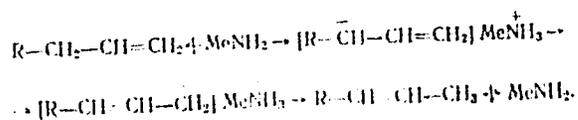
Isomerization of olefins in the presence of a basic catalyst ( $Ca(NH_2)_2$ ) proceeds, apparently, through the formation of carbanions by elimination of protons.

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Brief Communications. Isomerization of Some  
Dienes in the Presence of Calcium Amide

78030

307/52-60-1-27/37



There are 1 table; and 4 references, 1 U.S., 3 Soviet.  
The U.S. reference is: A. Henne, A. Turk, J. Am. Chem.  
Soc., 64, 826 (1942).

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

SUBMITTED: June 9, 1959

Card 4/4

KAZANSKIY, B.A.; DOROGUCHINSKIY, A.Z.; ROZENGART, M.I.; TYUN'KINA, N.I.;  
KUZNETSOVA, I.M.; LYUTER, A.V.; MITROFANOV, M.T.

Aromatization of mixtures of n. hexane with 2-methylpentane,  
with 3-methylpentane or methylcyclopentane. Izv.AN SSSR.Otd.  
khim.nauk no.7:1308-1309 JI '62. (MIRA 15:7)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.  
(Aromatization) (Paraffins)

AUTHORS: Liberman, A. L., Kuznetsova, I. M.,  
Tyun'kina, N. I., Kazanskiy, B. A.,  
Member of the Academy. 20-118-5-26/59

TITLE: Stereoisomeric 1-Methyl-2-Alkylcyclohexanes (Stereoizomernyye  
1-metil-2-alkiltsiklogeksany)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 118, Nr 5,  
pp. 942-945 (USSR)

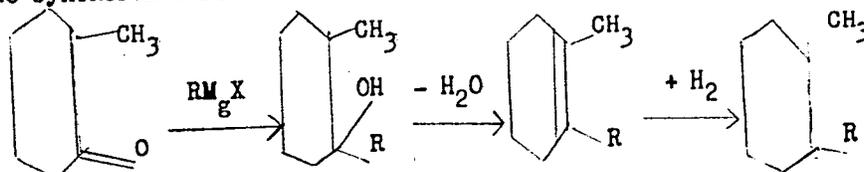
ABSTRACT: Data on dialkylcyclohexanes of this kind are rarely found in publications (references 1 - 6). For this reason their investigation is interesting in spite of great experimental difficulties. Certain surprising facts are found: the cis-isomer of 1,4,-di-isopropylcyclohexane boils at a lower temperature than the trans-isomer (reference 5) though according to the rule of Auvers Skit the contrary would have been expected. The reason of this peculiar inversion of the boiling points remains unexplained and still waits for investigation. In order to find out whether such exceptions are found in the series of other dialkylcyclohexane hydrocarbons, for example among the 1,2-dialkylcyclo-

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## Stereoisomeric 1-Methyl-2-Alkylcyclohexanes

20-118-5-26/59

hexanes, the authors synthesized some 1-methyl-2-n-alkylcyclohexanes, and separated them according to the stereoisomers. The syntheses were conducted according to a uniform procedure:



with R representing n-propyl, n-hexane, and n-heptyl. According to the results of the fractional distillation all stereoisomers were obtained in a highly pure form. It was proved that the constants of all hydrocarbons thus produced agree with the Auvers-Skit rule. 1-methyl-2-n-hexylcyclohexane and 1-methyl-2-n-heptylcyclohexane have as yet not been mentioned in publications, whereas 1-methyl-2-n-propylcyclohexane was obtained previously as a mixture of stereoisomers (reference 7) only, and not separated further by the mentioned authors. In the experimental part 7 compounds of the respective group are specified, among them one chloride and two bromides, as well as the usual data, are given.

There are 2 figures, 3 tables, and 11 references, 4 of which are Soviet.

Card 2/3

Stereoisomeric 1-Methyl-2-Alkylcyclohexanes

20-118-5-26/59

SUBMITTED: October 18, 1957.

Card 3/3

LIDERMAN, A.I.; TYUNIKINA, N.I.

Freezing points of some stereoisomeric dialkylcyclohexanes.  
Neftekhimiia 5 no.6:902-903 H-D 165. (MIRA 19:2)

I. Institut organicheskoy khimii imeni Zelinskogo AN SSSR.  
Submitted Dec. 28, 1964.

ALEKSANYAN, V.T.; STERIN, Kh.Ye.; UKHOLIN, S.A.; BRAGIN, O.V.;  
LIBERMAN, A.L.; MIKHAYLOVA, Ye.A.; SMIRNOVA, E.N.; TYUN'KINA, N.I.  
KAZANSKIY, B.A.

Raman spectra of certain hydrocarbons of the benzene series  
having one or two side chains. Izv. AN SSSR. Otd.khim.nauk  
no.8:1437-1443 Ag '61. (MIRA 14:8)

1. Komissiya po spektroskopii AN SSSR i institut organicheskoy  
khimii im. N.D. Zelinskogo AN SSSR.  
(Hydrocarbons--Spectra)

LIBERMAN, A.L.; TYUN'KINA, N.I.; KAZANSKIY, B.A., akademik

Stereoisomeric 1,4-di-n-propyl- and 1-methyl-4-metho-4-butylcyclohexanes.  
Dokl. AN SSSR 134 no.3:603-606 B '60. (MIRA 13:9)

1. Institut organicheskoy khimii im. N.D. Zelinskogo Akademii nauk  
SSSR.

(Cyclohexane)

KAZANSKIY, B.A., akademik; LIBERMAN, A.L.; TYUN'KINA, N.I.; KUZNETSOVA,  
I.M.

Limited applicability of the Auwers - Skita rule to stereoisomeric dialkylcyclohexanes. Dokl.AN SSSR 122 no.6:1025-1028 0 '58.  
(MIRA 11:12)

1. Institut organicheskoy khimii imeni N.D. Zelinskogo AN SSSR.  
(Isomers) (Refractive index) (Density)

TYUN'KINA, N.I.

USSR/ Organic Chemistry - Theoretical and general questions  
on organic chemistry

E-1

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 11593

Author : Gostunskaya I.V., Tyun'kina N.I., Kazanskiy B.A.

Inst : Academy of Sciences USSR

Title : Isomerization of Mono-Olefinic Hydrocarbons by Action of Calcium Amide

Orig Pub : Dokl. AN SSSR, 1956, 108, No 3, 473-476

Abstract : Study of isomerization of 2- and 3-methylbutene-1 (I and II) hexene-1 (III), 2,3-dimethylbutene-1 (IV), 2,3-dimethylbutene-2, 2,5-dimethylhexene-2 at 70° and 2,5-dimethylhexene-3 at 120°, by action of  $\text{Ca}(\text{NH}_2)_2$ . Study of isomerization products has revealed that the double bond is shifted from the end of the chain to the middle, as well as from the middle to the end, and in the mixture of isomers predominates the isomer having the greatest degree of substitution at the double bond. III is isomerized more rapidly than IV. With decreasing degree of substitution at the allyl carbon rate of isomerization increases (I is isomerized to 2-methylbutene-2 more rapidly than II). The authors assume that the reaction takes place with intermediate

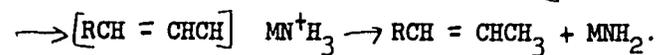
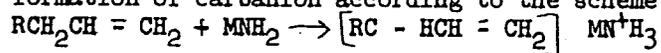
Card 1/2

USSR/ Organic Chemistry - Theoretical and general questions  
on organic chemistry

E-1

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 11593

formation of carbanion according to the scheme (wherein M is metal):



Card 2/2

**TYUHILYAYNEN, M.I.**

Determining the cross section of micron wires by the diffraction fringe method. Trudy Ural.politekh.inst. 73:279-290 '58.  
(MIRA 12:8)

(Wire)

(Thickness measurement)

CATEGORY : Farm Animals. Honeybee  
ABS. JOUR. : RZBiol., No. 13 1958, No. 59657  
AUTHOR : Tyunin, S.A.  
INST. :  
TITLE : The October Revolution and Experimental  
Apiculture in the USSR (From Personal  
Reminiscences)  
ORIG. PUB. : Pchelovodstvo, 1957, No.11, 29-36  
ABSTRACT : During the first years of existence of the  
Soviet state eight experiment stations of  
apiculture were organized in the country.  
The author describes the work of the Tula  
Experiment Station which he headed for 12  
years.

CARD:

1/1

COUNTRY : USSR  
CATEGORY :

ABS. JOUR. : RZhBiol., No. 1959, No.

AUTHOR :  
JMI. :  
TITLE :

ORIG. PUB. :

ABSTRACT : the contrary, even increased the invasion.  
Nothing else but the extraction of honey from  
the hives and cooling of nests by increasing  
their circumference terminated the apiary's  
dangerous state.

Card: 2/2

TYUNIN, SERAT FIKLAYEVICH

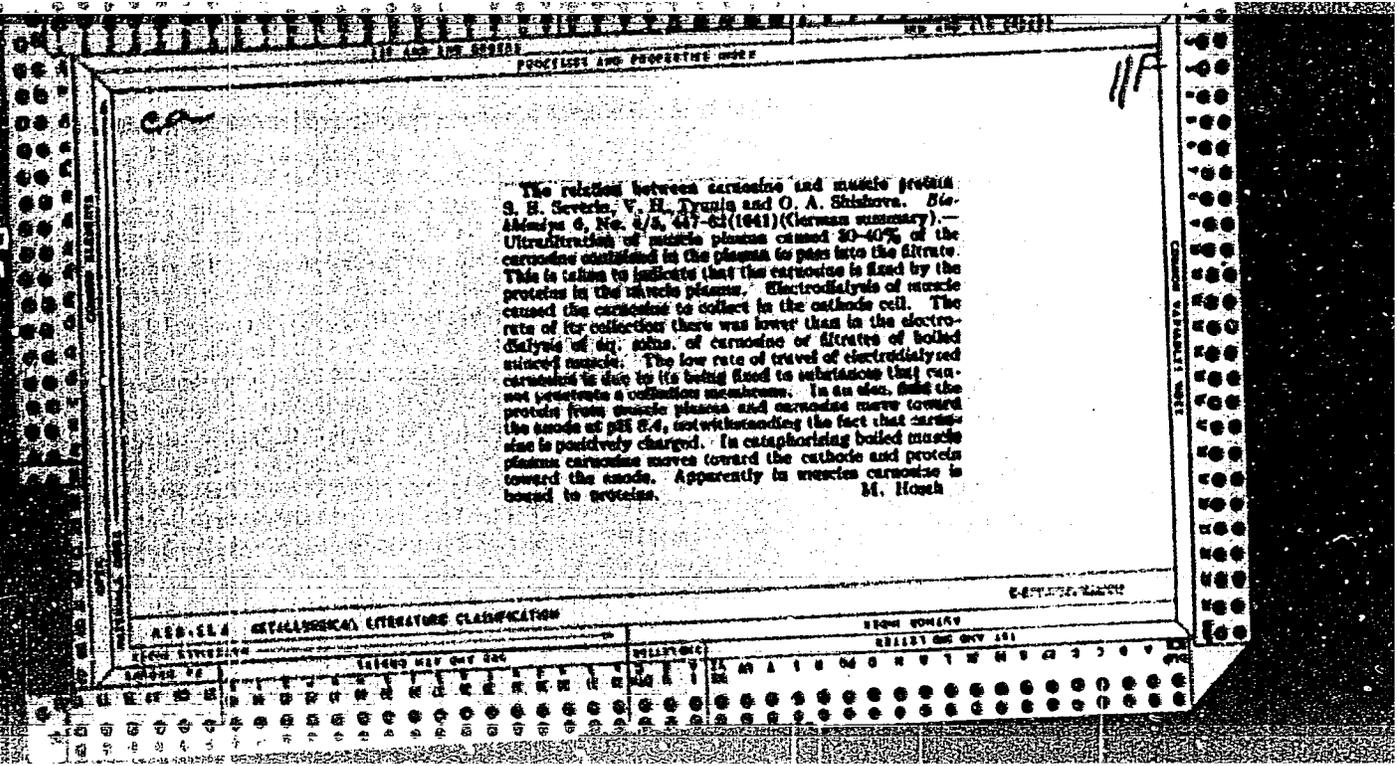
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.v9

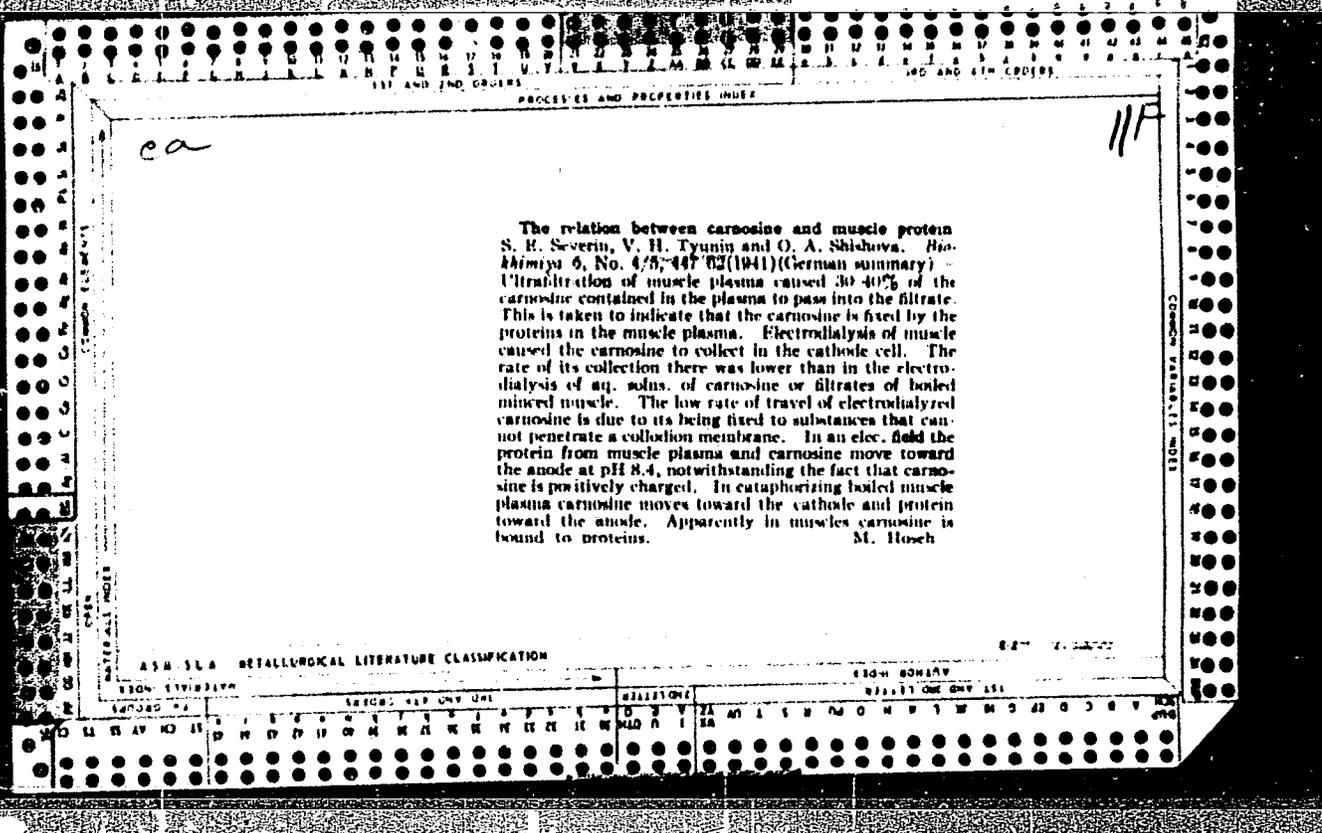
Voronezh (by) S.N. tyunin i konstantin vasil'yevich dologopolov. Moskva,  
Geografiz, 1954.

55p. illus., map.

TYUNIN, Sokrat Nikolayevich; DOLGOPOLOV, Konstantin Vavil'yevich;  
LAVRENT'YEVA, Ye.V., redaktor; RIVINA, I.N., tekhnicheskiy  
redaktor

Voronesh. Moskva, Gos. izd-vo geogr. lit-ry, 1954. 55 p.  
(Voronesh--Description) (MLRA 8:1)





TYUMINA, I. A.

"Investigation of Moments of Friction in Instrument Ball Bearings." Cand Tech Sci, Leningrad Inst of Precision Mechanics and Optics, Min Higher Education USSR, Leningrad, 1955. (KL, No 10, Mar 55)

SO: Sum. No. 670, 29 Sep 55-Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (15)

//F

CA TYUNINA, V.N.

Carnosine, anserine, and creatine in human muscle during ontogenesis. V. N. Tyunina (Med. Inst., Ministry of Health, R.S.F.S.R., Moscow). *Doklady Akad. Nauk S.S.S.R.* 72, 1095-7 (1960).—In adult muscle there are found (av.) 3.57 mg./g. carnosine and 18.00 creatine; anserine, detectable only from chromatographic examination, reaches only a fraction of mg./100 g. Similar analyses covering ontogenetic development starting with a 3-month embryo show: absence of carnosine until 4 months (10-11 mg. %), and progressive rise to 50-60% adult value by 8 months; creatine level is 40-45 mg. % at 3 months, with progressive age rise as above, reaching adult level at 8 months' postnatal age. G. M. Kosolapoff

ARDAMATSKIY, N.A.; MILOSLAVSKIY, Ya.M.; LIKHVANTSEV, V.A.; LECKUN, A.M.;  
TYUNINA, Ye.A.

Comparative evaluation of the results of studying the content  
of sodium and potassium in the plasma, whole blood and erythro-  
cytes in some internal diseases. Terap.arkh. 34 no.2:81-85 '62.  
(MIRA 15:3)

1. Iz kafedry fakul'tetskoy terapii (i. o. zav. - dotsent N.A.  
Ardamatskiy) Ryazanskogo meditsinskogo instituta imeni akad.  
I.P. Pavlova.

(SODIUM IN THE BODY) (POTASSIUM IN THE BODY)  
(BLOOD-EXAMINATION)

GRECHIKHIN, L.I.; TYUNINA, Ye.S.

Forbidden lines of sodium and lithium atoms in the flame of a  
d-c arc. Teplofiz. vys. temp. 1 no.3:399-403 N-D '63. (MIRA 17:3)

1. Institut fiziki AN BSSR.

L 11442-67  
ACC NR: AT6023935

SOURCE CODE: UR/3220/66/000/001/0103/0115

22

AUTHOR: Kozlov, E. S.; Tyun'kov, V. S.

ORG: none

TITLE: The use of digital logic elements of the Ural 10 assembly in analog devices for solving boundary value problems

SOURCE: Tsifrovaya vychislitel'naya tekhnika i programirovaniye, no. 1, Moscow, 1966, 103-115

TOPIC TAGS: logic element, analog digital computer system, analog computer, computer design

ABSTRACT: This article examines the feasibility of using logic units of the Ural-10 assembly in network analog computers. Specific examples given of the operation of logic assemblies in these devices are in the boundary condition block, the synchronizer of this block, the frequency divider, the decade scaler, the boundary-condition automatic input, and the block controlling entry of parameters in the automatic resistance network. The results of using elements from digital technology in analog devices are reported and paths are marked out for further development of the concept of digital-analog combinations for solving boundary value problems. The main advantages of combined action are the drastic reduction of planning operations for electrical and functional circuits, the unification of designs and uniformity of elements enabling

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UDG: 681.142.343.6

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ACC NR: AT6023935

digital experience to be applied in planning units in analog networks, thus simplifying labor in making mockups of these systems and the reduction of assembly error, which is very important in debugging computers in general and network analog computers in particular. The reliability of Ural-10 subassemblies is so great that when blocks are correctly assembled they are ready to work and need scarcely any debugging. The future will see great development of the use of digital elements in network analog computers. This progressive step creates the real prerequisites for the creation of digital-analog complexes having the properties of digital computers and a network electric model, of particular use in solving complex engineering problems in the oil industry, chemistry, construction, and other fields in the national economy. Orig. art. has: 1 formula, 1 table, and 9 figures.

SUB CODE: 09/ SUBM DATE: none/ ORIG REF: 007/ OTH REF: 001

Card

212

*lm*

TYUNYAYEV, M.; IVCHENKO, N.; VASIL'YEV, Ya.; RYABOKUCHMA, S.; BRATERSKIY, F.,  
aspirant

Use of jet engines and ventilating systems for drying corn. Muk.-  
elev.prom. 28 no.3:18-24 Mr '62. (MIRA 15:4)

1. Nachal'nik upravleniya khlebopriyemnykh predpriyatiy Ministerstva zagotovok Moldavskoy SSR (for Tyunyayev).
  2. Zamestitel' nachal'nika Chernovitskogo upravleniya zagotovok (for Ivchenko).
  3. Glavnyy inzhener Kuybyshevskogo upravleniya zagotovok (for Vasil'yev).
  4. Zamestitel' direktora po kachestvu Khashchevatskogo khlebopriyemnogo predpriyatiya (for Ryabokuchma).
  5. Severo-Osetinskiy sel'skokhozyaystvennyy institut (for Braterskiy).
- (Corn (Maize)--Drying)

TYUMENTSEV, N.F.

Developing a method for the qualitative rating of soils on the  
basis of genetics and production. Izv.Sib.otd.AN SSSR no.12:79-90  
'59. (MIRA 13:5)

1. Tomskiy gosudarstvennyy universitet.  
(Soils--Classification)

PHASE I BOOK EXPLOITATION

SOV/5724

Moscow. Universitet.

Voprosy mekhaniki; sbornik statey. vyp. 193. (Problems of Mechanics; Collection of Articles. no. 193) [Moscow] Izd-vo Mos. univ., 1961. 169 p. Errata slip inserted. 5,000 copies printed.

Sponsoring Agency: Moskovskiy gosudarstvennyy universitet imeni M. V. Lomonosova.

Ed.: L. N. Sretenskiy, Corresponding Member, Academy of Sciences USSR. Ed. (This vol.): I. Z. Pirogov; Tech. Ed.: G. I. Georgiyeva.

PURPOSE: This book is intended for engineers and scientific workers interested in the mechanics of materials, fluid dynamics, and radiation.

COVERAGE: The book contains articles on problems of algebra, non-linear programming, motion of particles, elasticity, stress-strain, vibration, and flow of liquids. No personalities are mentioned. References follow all but one article.

Card 1/3

Problems of Mechanics; (Cont.)

SOV/5724

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AVAILABLE: Library of Congress

Card 3/3

AC/dfk/ec  
11-6-61

MIRZOEVA, V. Sh.; TYUNINA, Ye. V.

Gelatine

Cooperation between science and industry, Mikrobiologiia 22, No. 1, 1953.

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

LIBERMAN, A.L.; TYUN'KINA, N.I.

Inversion of the sequence of boiling points of stereoisomeric  
1,4-di-sec. alkyl cyclonexanes. Neftekhimiia 3 no.6:828-834  
N-D '63. (MIRA 17:3)

1. Institut organicheskoy khimii AN SSSR im. N.D.Zelinskogo.

S/020/60/134/003/012/020  
B016/B054

AUTHORS: Lieberman, A. L., Tyun'kina, N. I., and Kazanskiy, B. A.,  
Academician

TITLE: The Stereoisomeric 1,4-Di-n-Propyl- and 1-Methyl-4<sup>2</sup>-metho-4-  
butyl Cyclohexanes

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 134, No. 3,  
pp. 603-606

TEXT: After having proved (Refs. 1-3) that the physical properties of  
some 1,4-dialkyl cyclohexanes deviate from the constants usually holding  
for this series, the authors expressed the opinion that the differences  
between the boiling points of the stereoisomers ( $\Delta t = t_{\text{cis}} - t_{\text{trans}}$ ) are  
linearly dependent on the molecular weight (Ref. 4). There were, however,  
several deviations from this rule. This is explained by the fact that the  
structure of the side chain was not considered. The present paper is to  
clarify the influence of this structure. For this purpose, the authors  
synthesized 1,4-di-n-propyl- and 1-methyl-4<sup>2</sup>-metho-4-butyl cyclohexanes,  
and separated them into cis- and trans-isomers. These two compounds are  
Card 1/3

The Stereoisomeric 1,4-Di-n-Propyl- and  
1-Methyl-4<sup>2</sup>-metho-4-butyl Cyclohexanes

S/020/60/134/003/012/020  
B016/B054

structural isomers of 1,4-di-isopropyl cyclohexane, in whose stereoisomers there occurs an inversion of boiling points. The hydrocarbons were chosen in such a way that in one case their side chains were equal, while being different in another. This should make it clear in how far the asymmetry of radicals can influence the value  $\Delta t$ . It was found that the trans-form of the stereoisomers produced in this investigation boils lower than the cis-form, i.e.,  $\Delta t$  has a positive value, whereas the value of 1,4-di-isopropyl cyclohexanes was negative (Refs. 1,4). Thus, the primary, secondary, or tertiary character of the side chain considerably influences the relation of boiling points of the stereoisomeric dialkyl cyclohexanes. The problem of a linear dependence in the series of 1,4-dialkyl cyclohexanes with primary radicals remains unsolved. The authors synthesized the hydrocarbons in such a way that products of maximum possible purity were formed. The hydrogen addition to the double bond of the resulting intermediate product, butenyl toluene, is (in the presence of platinum at room temperature) accompanied by partial hydrogenation of the benzene ring. Nevertheless, it was possible to obtain the hitherto unknown 4<sup>2</sup>-metho-4-butyl toluene by distillation in the pure state. Further, 4<sup>2</sup>-oxy-4<sup>2</sup>-metho-4-butyl toluene was produced for the first time. The

Card 2/3

The Stereoisomeric 1,4-Di-n-Propyl- and  
1-Methyl-4<sup>2</sup>-metho-4-butyl Cyclohexanes

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B016/B054

configuration, hitherto not described in publications, of the four stereoisomers was determined with the aid of the Raman spectra (taken by V. T. Aleksanyan and Kh. Ye. Sterin, co-workers of the Komissiya po spektroskopii (Commission on Spectroscopy) OFMN AN SSSR (Department of Physical and Mathematical Sciences of the Academy of Sciences, USSR)). Table 1 shows that both the refractive indices and the specific gravities are in all cases higher in the cis-forms, whereas the boiling points of the cis-forms are higher or lower depending on the structure of the side chains. Fig. 1 shows refractive index and specific gravity of the fractions of the hydrocarbons investigated. There are 1 figure, 1 table, and 10 references: 8 Soviet and 2 US.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences, USSR)

SUBMITTED: June 6, 1960

Card 3/3

08/31/2001

CIA-RDP86-00513R001757730001-0

S/048/62/026/010/009/017  
B117/B186

AUTHORS: Zhizhin, G. N., Barinova, Z. B., Liberman, A. L.,  
Kuznetsova, I. M., and Tyun'kina, N. I.

TITLE: Infrared absorption spectra of cis- and trans-isomers of  
1-methyl-2-N-alkyl cyclohexanes

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya,  
v. 26, no. 10, 1962, 1263-1266.

TEXT: Infrared absorption spectra of five pairs of cis- and trans-isomers of the 1-methyl-2-alkyl cyclohexane series having alkyl radicals (CH<sub>3</sub>, C<sub>2</sub>H<sub>5</sub>, C<sub>3</sub>H<sub>7</sub>, C<sub>6</sub>H<sub>13</sub>, and C<sub>7</sub>H<sub>15</sub>) were examined and compared with the corresponding Raman spectra (V. T. Aleksanyan, Kh. Ye. Sterin, A. L. Liberman, I. M. Kuznetsov, N. I. Tyun'kina, B. A. Kazanskiy, Sb.: Issledovaniya po eksperimental'noy i teoreticheskoy fizike. Panyati akademika G. S. Landsberga (Investigations in the field of experimental and theoretical physics. In memory of Academician G. S. Landsberg), p. 43, Izd. AN SSSR, M., 1959). The cis- and trans-isomers have been synthesized previously (P. A. Bazhulin, S. A. Ukholin,

Infrared absorption spectra

S/048/62/026/010/009/013  
B117/B186

T. F. Bulanova, A. V. Koperina, A. F. Plate, B. A. Kazanskiy, Izv. AN SSSR, Otd. khim. nauk, no. 5, 480 (1949); G. S. Landsberg, B. A. Kazanskiy et al. Opredeleeniye individual'nogo uglevodorodnogo sostava benzinov pryamoy gonki kombinirovannym metodom (Determination of the pure hydrocarbon composition of direct distillation gasolines by the combined method), Izd. AN SSSR, M., 1959; A. L. Liberman, N. M. Kuznetsova, N. I. Tyun'kina, B. A. Kazanskiy, Dokl. AN SSSR, 118, 942 (1958)). At most frequencies the two spectra were identical. The greatest difference was observed with the infrared spectra of cis- and trans-isomers within the range 585-610  $\text{cm}^{-1}$ , wherein cis-isomers show a band with an absorption maximum of not less than 30-35 % while trans-isomers exhibit no marked bands. The lines in the corresponding range of the Raman spectra are very weak. Further differences: Within the ranges 800-810, 842-853, 972-975, 1155-1157  $\text{cm}^{-1}$  cis-isomers exhibit distinctly marked bands with absorption maxima of 60-90%, while the corresponding bands of trans-isomers are either weak or absent. Trans-isomers display intense lines between 865 and 871  $\text{cm}^{-1}$  and distinct lines between 1350 and 1357  $\text{cm}^{-1}$  on the edge of the very intense 1380  $\text{cm}^{-1}$  bands. In the spectra of the trans-isomers, the bands of the cis-isomers (972-975 and 1155-1157  $\text{cm}^{-1}$ ) are shifted into the

Card 2/3

Infrared absorption spectra ...

S/048/62/026/010/009/013  
B117/B186

ranges 965-968 and 1159-1163  $\text{cm}^{-1}$ , respectively. Despite the identity of most of the frequencies, the characteristics of Raman and infrared absorption spectra very rarely coincide, so the two spectra complement one another. There are 1 figure and 1 table.

ASSOCIATION: Komissiya po spektroskopii Akademii nauk SSSR (Commission on Spectroscopy of the Academy of Sciences USSR).  
Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences USSR)

Card 3/3

GOSTUNSKAYA, I.V.; TYUN'KINA, N.I.; KAZANSKIY, B.A., akademik.

Isomerization of mono-olefin hydrocarbons under the action of calcium amide. Dokl.AN SSSR 108 no.3:473-476 My '56.(MLRA 9:8)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.  
(Olefins) (Isomers and isomerization) (Amides)

ZHIZHIN, G.N.; BARINOVA, Z.B.; LIBERMAN, A.L.; KUZNETSOVA, I.M.; TYUN'KINA, N.I.

Infrared absorption spectra of cis-trans isomers of 1-methyl-2-n-alkylcyclohexanes. Izv. AN SSSR.Ser.fiz. 26 no.10:1263-1266 0 '62.  
(MIRA 15:10)

1. Komissiya po spektroskopii AN SSSR i Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.  
(Cyclohexane) (Isomera--Spectra)

ACC NR: AP5025747 EWT(d)/EWP(1) IJP(c) BB/GG

SOURCE CODE: UR/0286/65/000/018/0095/0095

AUTHORS: Kozlov, E. S.; Tyun'kov, V. S.

ORG: none

47  
13

TITLE: An electric analog computer for solving boundary value problems with a moving phase boundary. Class 42, No. 174856 [announced by Scientific Research Institute of Control Computers (Nauchno-issledovatel'skiy institut upravlyayushchikh vychislitel'nykh mashin)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 18, 1965, 95

TOPIC TAGS: analog computer, boundary value problem, computer calculation  
ABSTRACT: This Author Certificate presents an electric analog computer for solving boundary value problems with a moving phase boundary. The computer contains units of a special network, boundary conditions, nonlinear boundary conditions, and recording units. To simulate changes in the physical properties of substances, caused by an external influence, it contains a combined nodal point (consisting of automatically controlled resistances and capacitances) and switching circuits operating from the potential of the nodal point. The potential is automatically connected to the nodal point of the integrator, which has arbitrarily set integration limits. The nodal point of the network controls switching devices for simulation of the latent heat of fusion (solidification) of substances.

SUB CODE: 09/ SUBM DATE: 11Jul64

BVK  
Card 1/1

UDC: 681.142

2

TYUNNIKOV, N.P.

Drum for treating hides. Patent U.S.S.R. 79,015, Dec. 31, 1949.  
(CA 47 no.19:10262 '53)

VOROB'YEV, Vasilii Ivanovich; TYUNOV, G.Z.

[We started with long steps] My vziali shirokii shag.  
Ul'yanovsk, Ul'yanovskoe knizhnoe izd-vo, 1963. 48 p.  
(MIRA 18:1)

TYUNOV, Georgiy Zoteyevich

Vereshchagino. Perm', Permskoe knizhnoe izd-vo, 1960. 61 p.  
(MIRA 14:10)

(Vereshchagino--Description)

TYUNOV, L.A.

Problem of experimental models in the search for antineoplastic  
agents. Vop.onk. 6 no.1:37-38 '60. (MIRA 13:10)  
(CYTOTOXIC DRUGS)

TIUNOV, V. F., ed.

Zapadno-sibirskii kraj; goroda i raiony. [West Siberian territory: towns and regions].  
Osnovnye pokazateli, Pod red. pr=d. Zapsibkraiplana V.F. Tiunova. Novosibirsk,  
Zapadno-sibirskoe kraevoe izdvo, 1936. 373 p.  
Contains information concerning all forms of transportation and communication broken  
down by region. DLC: DK753.T5

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress,  
Reference Department, Washington, 1952, Unclassified.

TYUNOV VASILIIY FILIPPOVICH  
TYUNOV, VASILIIY-FILIPPOVICH

73/5  
780.3  
.061

Promyshlennoye Razvitiye Zapadnogo Urala: Kniga Vtoraya (Industrial Development  
in the Western Urals) Molotov, Molotovskoye Knizhnoye Ize-vo, 1957.  
351, (1) p. Tables.  
"Literatura": p. 345-352.

PCTENKINA, V. A., GEBSELEVICH, YE., GRIGORIAN, G. A., DEMIDOV, M. V., FEKTISTRO, P. I.,  
KRYUKOVA, K. A., PANASYUK, D. I., TYUNCY, V. I., SHKODIN, N. YE., SVESHNIKOVA, N. M.  
SUDARIKOV, V. YE.

Parasites

Dissertations in helminthology, defended in 1949-1950. Trudy Gel'm. lab. no. 5, 1951.

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

TYUNOV, V. I.,

"Worm diseases (Helminthiases) of agricultural animals and the fight against them." Kirov. Kirov Oblast State Publishing House, 1952.

29 pages with illustrations. price 60 kopeks, 5,000 copies.

(Kobkhoznik's Library)

SO: Veterinariya; 26(5). May 1953

30

PURCHES

LYUBIMOV, Lev Borisovich; TYUPIN, Andrey Sergeyevich; GLADKOV,  
V.A., red.; SYCHEVA, V.A., tekhn. red.

[The quality of fish is excellent; from the experience  
of the crew of the trawler "Sovetskaia Konstitutsiia."]  
Kachestvo ryby - otlichnoe; iz opyta moriakov traulera  
"Sovetskaia Konstitutsiia." Murmansk, Murmanskoe knizh-  
noe izd-vo, 1961. 19 p. (MIRA 17:2)

SEBEYDEROVA, V.V.; PRONYAKOVA, V.M.; TYUNTINA, Z.Ya.

Testing the durability of insulating lacquer paints and film coatings protecting ferroconcrete surfaces from crack formation. Izhmash. No. 5:74-75 '60. (MIRA 13:11)

(Protective coatings--Testing)

TYUNYAYEV, N. A.

TYUNYAYEV, N. A., gornyy inzhener-Markakheyder.

Suspension sighting piece for the control of mining operations.  
Gor.zhur. no.9:75 S '57. (MLAA 10:9)

1. 'Trest Makejevugol'. (Mine surveying)

TYUNYAYEV, V.L.

Specialization in manufacturing metal-cutting tools. Mashinostroitel'  
no.1:35-36 Ja '61. (MIRA 14:3)  
(Metal-cutting tools)

TYUNYAYEV, V.L., inzh.

Concentration and specialization of the manufacture of tools  
and technological equipment in a consolidated economic area.  
Vest. mashinostr. 45 no.1:74-77 Ja '65. (MIRA 18:3)

CHISTOV, A.D.; BAZARNOVA, G.V.; BEK, N.D.; BELIKOVA, V.I.; BLINOVA, M.Ya.;  
KABANOVA, P.G.; MAKAROVA, M.D.; PRIPISTSOVA, K.D.; SIMONOVA, L.F.;  
TOLKACHEVA, Ye.M.; TYUNYAYEVA, Y.V.; ZINCHENKO, V.S., red.izd-va;  
PAVLOVSKIY, A.A., tekhn.red.

[Foreign trade of the U.S.S.R. for 1918-1940; statistical survey]  
Vneshniaya torgovlia SSSR za 1918-1940 gg.; statisticheskiy obzor.  
Moskva, Vneshtorgizdat, 1960. 1134 p. (MIRA 13:10)

1. Russia (1923- U.S.S.R.) Glavnoye tamozhennoye upravleniye.
2. Otdel statistiki Glavnogo tamozhennogo upravleniya Ministerstva  
vneshney torgovli SSSR (for all, except Zinchenko, Pavlovskiy).  
(Commercial statistics)

ARTYUKHOVA, N.N.; BREMER, L.F.; GRIGORENKO, A.S.; IPATOVA, M.S.;  
KAREYSHEVA, T.D.; KOZLOV, V.M. · KOLYSHEVA, L.I.;  
KUCHUMOVA, N.A.; MAKAROVA, M Ye.; PUCHKOVA, N.A.;  
SEKIRINA, Ye.T.; SOKOLOVA, T.S.; STATIYEVA, V.F.;  
TYUNYAYEVA, V.V.; KHRAMTSOVA, A.A.; CHURAYEVA, V.V.;  
FOKIN, D.F., red.

[Foreign trade of the U.S.S.R. for 1959-1963; a statistical  
abstract] Vneshniaia torgovlia Soiuza SSR za 1959-1963 go-  
dy; statisticheskiy sbornik. Moskva, Vneshtorgizdat, 1965.  
483 p. (MIRA 18:7)

1. Russia (1923- U.S.S.R.) Ministerstvo vneshney torgovli.  
Planovo-ekonomicheskoye upravleniye. 2. Nachal'nik Planovo-  
ekonomicheskogo upravleniya Ministerstva vneshney torgovli  
SSSR (for Fokin).

OSTASHEVSKAYA, N.S.; PAK GYM-SUN; TYUNYUKOV, B.K.; VASIL'YEVA, L.M.;  
FEDINA, Ye.Z.; LOSKUTOVA, Ye.N.

Mechanism of the coking of noncaking coals under pressure. Trudy  
Khim.-met.inst.Sib.otd. AN SSSR no.18:54-64 '63. (MIRA 17:4)

GRIGOR'YEVA, N.Ye.; RODIONOVA, L.A.; SHCHERBAKOVA, L.I.; TYUPA, D.P.

Certain transformations of glutaconaldehyde dianils. Zhur.  
ob.khim. 32 no.2:493-501 F '62. (MIRA 15:2)

1. Khar'kovskiy gosudarstvennyy universitet.  
(Glutaconaldehyde)

TYUPA, V.G. [Tiupa, V.H.]; SHLYAKHOVAYA, N.I. [Shliakhova, N.I.]

Turing's algorithms. Zbir.prats' z obchys.mat.i tekh. 1:31-44 '61.  
(MIRA 16:2)

(Algorithm)

TYUPICH, M.M., kand. biolog. nauk

Artificial insemination of heifers. Zhivotnovodstvo 23 no.3: 93-95  
(MIRA 17:1)

Mr '61.

TYUPKO, Valentin Afanas'yevich, Geory Sotsialisticheskogo Truda; Pri-  
nimal uchastiye POPOV, N.I., inzh.; GREBTSOV, P.P., red.;  
GUREVICH, M.M., tekhn. red.

[Over-all mechanization in cotton growing] Kompleksnaia mekha-  
nizatsiia v khlopkovodstve. Moskva, Sel'khozizdat, 1962. 46 p.  
(MIRA 15:12)

1. Mekhanizator Gosudarstvennoy sredneaziatskoy zonal'noy ma-  
shinoispytatel'noy stantsii (for Tyupko).  
(Cotton growing) (Farm mechanization)

S/044/62/000/009/051/069  
A060/A000

9.7000

AUTHOR: Tyupa, V. G., Shlyakhova, N. I.

TITLE: On Turing type algorithms

PERIODICAL: Referativnyy zhurnal, Matematika, no. 9, 1962, 37, abstract V193  
("Zb. prats' z obchisl. matem. i tekhn." T. I. Kyiv, AN URSR, 1961,  
31 - 44 (Ukrainian, Russian summary)

TEXT: Turing machines are investigated. An algorithm is described for adding on the Turing machine of two n-digit binary numbers, to realize which not more than  $2n^2 + 11n + 17$  elementary machine operations are required. Such a large number is caused by the necessity of transferring information from one number to another, which is difficult in the presence of a single reading head. A description is then given of the transformation of the corresponding Turing machine, which leads to a reduction in the number of machine states by increasing the number of symbols of the input alphabet. It is indicated that a universal Turing machine with two states is usually inconvenient, because it causes a complication of the functional scheme and an increase in the operating time

✓  
B

Card 1/2

S/044/62/000/009/051/069  
A060/A000

On Turing type algorithms

of the special-purpose Turing machine realized by it. A modified version of a universal Turing type machine is given. This simplified scheme possesses 20 states and makes it easier to program special-purpose functional schemes. The machine has two tapes and, accordingly, two reading heads. Such a scheme makes it possible to avoid indeterminate back and forth motions of the reading head along the tape, thus raising the speed of the algorithm and giving the possibility of easily determining the mathematical expectation of the number of elementary operations in realizing it. ✓  
B

V. V. Martynyuk

[Abstracter's note: Complete translation]

Card 2/2

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33868

S/696/61/001/000/002/007  
D251/D304

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AUTHORS: Tyupa, V. M. and Shlyakhovaya, N. I.

TITLE: On Turing-type algorithms

SOURCE: Akademiya nauk Ukrayins'koyi RSR, Obchyslyuval'nyy  
tsentr. Zbirnyk prats' z obchyslyuval'nyy matematyky  
i tekhniky. v. 1, 1961, 31-44

TEXT: The authors describe their work - in which they were greatly assisted by V. M. Hlushkov and V. S. Korolyuk - on the classical Turing algorithms. Algorithms of the operation of addition of two-code numbers and the universal algorithm are discussed. The questions of the equivalent transformation of the Turing algorithms which will not vary the path of the reading head and of the minimally possible choice of states are discussed. Algorithms are proposed in detail, the functional matrices being given in tabular form. It is stated that the proposed scheme makes it possible to eliminate undefined oscillatory motion of the reading head along the tape. Thus the rapidity of action may be increased,

Card 1/2

33868

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D251/D304

On Turing-type algorithms

and the working time decreased. There are 5 tables and 4 referen-  
ces: 3 Soviet-bloc and 1 non-Soviet-bloc. The reference to the ✓  
English-language publication reads as follows: A. M. Turing: On  
computable numbers, with an application to the Entscheidungspro-  
blem, Proc. London, Math. Soc., (2) 42, 230-265, 1936.

Card 2/2

AZIZYAN, A.K.; ANDRIYANOV, B.V.; BARASHEV, P.R.; BUGAYEVA, M.I.; VASIL'YEV,  
N.I.; DENISOV, H.N.; ZASLAVSKIY, B.Yo.; OSTROUMOV, G.N.; TYUPAYEV,  
A.S.; ADZHUBEY, A.I., red.; GORYUNOV, D.P., red.; IL'ICHEV, L.F.,  
red.; SATYUKOV, P.A., red.; SIVOLOBOV, M.A., red.; SKURIDIN, G.A.,  
red.; TOLMACHEV, A.V., red.; DANILINA, A.I., tekhn. red.

[Dawn of the outer space era] Utro kosmicheskoi ery. Moskva, Gos-  
politizdat, 1961. 762 p. — [Phonograph record "World flight to  
the stars. Soviet man in outer space;" report] Gramofonnaya platin-  
ka "Vsemirnyi reis k zvezdam. Sovetskii chelovek v kosmose"; repor-  
tazh. (MIRA 14:10)

1. Redaktsiya gazety "Pravda" (for Azizyan, Denisov).
2. Komitet po radioveshchaniyu i televideniyu (for Andriyanov).
3. Redaktsiya gazety "Komsomol'skaya pravda" (for Barashev).
4. Redaktsiya gazety "Sovetskoye foto" (for Bugayev).
5. Redaktsiya gazety "Krasnaya zvezda" (for Vasil'yev).
6. Gosudarstvennoye izdatel'stvo politicheskoy literatury (for Zaslavskiy).
7. Redaktsiya gazety "Izvestiya" (for Ostroumov).
8. Telegrafnoye agenstvo SSSR (for Tyupayev). (Astronautics)

10

CA

Synthesis and properties of methyl vinyl ether. M. P. Shostakovskii and P. V. Tyupman. *Zhur. Obshch. Khim. (J. Gen. Chem.)* 21, 1830-6 (1951).—Since no truly authentic prepn. of  $\text{MeOC}(\text{H})\text{CH}_2$  (I) has been reported, it was prepd. as follows: on heating 40 g. KOH and 400 g. dry MeOH in an autoclave in a fresh portion of  $\text{CaH}_2$  21 times immediately, and passing in a fresh portion of  $\text{CaH}_2$  21 times (2.0-l. autoclave;  $\text{CaH}_2$  fed in under 4-8 atm. at room temp.; max. pressure about 60 atm.) the addn. reaction was complete, and purification by distn., washing with aq. alkali, and distn. over Na, gave pure I,  $b_p$  4.8°,  $b_m$  4.8°,  $d_4^{20}$  0.7725,  $n_D^{20}$  1.3730,  $d_4^{25}$  0.7725,  $n_D^{25}$  1.3730,  $d_4^{30}$  0.7725,  $n_D^{30}$  1.3730,  $d_4^{35}$  0.7725,  $n_D^{35}$  1.3730,  $d_4^{40}$  0.7725,  $n_D^{40}$  1.3730,  $d_4^{45}$  0.7725,  $n_D^{45}$  1.3730,  $d_4^{50}$  0.7725,  $n_D^{50}$  1.3730,  $d_4^{55}$  0.7725,  $n_D^{55}$  1.3730,  $d_4^{60}$  0.7725,  $n_D^{60}$  1.3730,  $d_4^{65}$  0.7725,  $n_D^{65}$  1.3730,  $d_4^{70}$  0.7725,  $n_D^{70}$  1.3730,  $d_4^{75}$  0.7725,  $n_D^{75}$  1.3730,  $d_4^{80}$  0.7725,  $n_D^{80}$  1.3730,  $d_4^{85}$  0.7725,  $n_D^{85}$  1.3730,  $d_4^{90}$  0.7725,  $n_D^{90}$  1.3730,  $d_4^{95}$  0.7725,  $n_D^{95}$  1.3730,  $d_4^{100}$  0.7725,  $n_D^{100}$  1.3730. I is insol. in polyhydric alcs., reacts vigorously with concd.  $\text{H}_2\text{SO}_4$ , less vigorously with  $\text{HCl}$ , is rapidly hydrolyzed by aq. acids, yielding MeOH and AcOH, and forms a water-sol. polymer with  $\text{SnCl}_4$ .

G. M. Kosolapoff

Lab of Vinyl Compds, Inst. Org Chem, Acad. Sci USSR

ГЮРАЕВ, Р. В.

Chem

Chem Abs 175

1-25-54

Organic Chemistry

Vinylation of ethylene glycol. Ethylene glycol mono-  
divinyl acetal. Ethylene glycol cyclic acetal. M. P. Shostakovskii and P. V. Tyupaev. *Akad. Nauk S.S.S.R., Izv. Ore. Khim., Sintezy Org. Soedinenii, Sbornik 2*, 39-43(1952); cf. *C.A.* 38, 330<sup>o</sup>.—An autoclave is charged with 15 g. KOH and 300 g. (CH<sub>2</sub>OH)<sub>2</sub> and C<sub>2</sub>H<sub>2</sub> added to 8-16 atm. It is carefully heated with agitation to 140° for 0.5 hr., cooled to -30-40°, C<sub>2</sub>H<sub>2</sub> again added and reheated. After uptake of 0.8 mole C<sub>2</sub>H<sub>2</sub> per mole glycol the app. is cooled and the products distd. yielding: 40% HOCH<sub>2</sub>CH<sub>2</sub>OCH:CH<sub>2</sub> (I),

80 g. (CH<sub>2</sub>OCH:CH<sub>2</sub>)<sub>2</sub> (II), and 15 g. MeCH.O.CH<sub>2</sub>.CH<sub>2</sub>.O (III). II is predominantly formed if the heating cycle is increased to 1-2 hrs. especially near the end of the reaction with pressure reaching 28 atm. In this case the yields are: 70% II and 14% III. If the reaction is run at 190° until complete satn. with C<sub>2</sub>H<sub>2</sub> takes place and the mixt. is kept at this temp. 3 hrs. after each addn. of C<sub>2</sub>H<sub>2</sub>, III is the main product (68%) with 8% II. II and III are best purified by treatment with Na in the cold. In distn. of II it is best to pass a slow stream of air through the app. for agitation. I is best distd. from a small piece of K<sub>2</sub>CO<sub>3</sub> for prevention of isomerization to III or more complex products. I b<sub>711</sub> 140°, d<sub>20</sub> 0.9821, n<sub>D</sub><sup>20</sup> 1.4300; II b<sub>711</sub> 126.8°, d<sub>20</sub> 0.9220, n<sub>D</sub><sup>20</sup> 1.4350; III b<sub>711</sub> 81-2°, d<sub>20</sub> 0.9795, n<sub>D</sub><sup>20</sup> 1.3972.

G. M. Kosolapoff

7-19-54

ТЮПАЙС, Г.Г.

(3)

Chem Abs 148

1-25-54

Organic Chemistry

~~Triethyl ether of ethylene glycol. M. P. Shostakovskii  
 and E. V. Lyubov. Akad. Nauk S.S.S.R., *Izv. Org.  
 Khim., Sintezy Org. Soedinenii, Sbornik 2*, 61-3 (1952); *Ch.  
 C.A.* 38, 330<sup>o</sup>; U.S. 1,959,927. *C.A.* 28, 4431<sup>o</sup>.—An autoclave  
 is charged with 18 g. KOH and 360 g. EtOCH<sub>2</sub>CH<sub>2</sub>OH.  
 C<sub>2</sub>H<sub>6</sub> is added from a cylinder and the vessel heated with  
 agitation to 160° 0.5 hr. After cooling to 30–40° the C<sub>2</sub>H<sub>6</sub>  
 pressure is restored and the heating repeated until the reac-  
 tion ceases (the last charges of C<sub>2</sub>H<sub>6</sub> require 1–2 hrs. for  
 consumption). The final pressure is about 29 atm. After  
 washing with H<sub>2</sub>O, the product gave on distn. 84% EtOCH<sub>2</sub>-  
 CH<sub>2</sub>CH:CH<sub>2</sub>, *b<sub>ms</sub>* 123.7–3.9°, *d<sub>4</sub>* 0.8760, *n<sub>D</sub><sup>20</sup>* 1.4125.  
 Before final distn. the product is treated with Na in the  
 cold. No Ag or Cu parts of app. must come in contact  
 with C<sub>2</sub>H<sub>6</sub>. G. M. Kosolapoff~~

MF  
7-19-54

ТЮПАЯЕВ, П. В.

Can. 3  
③

Chem Abs V 48  
1-25-54  
Organic Chemistry

~~Di-bromomethyl methyl ether. M. P. Shostakovskii and P. V. Tyubayev. *Akad. Nauk S.S.S.R., Inst. Org. Khim., Sintezy Org. Soedinenii, Sbornik 2, 81-4 (1952); cf. C.A. 38, 330.*—In a flask provided with a Hg-sealed stirrer passing through a reflux condenser, and a dropping funnel with a cooling jacket and a pressure equalizing tube is charged some  $CCl_4$  (enough to activate the thermometer inserted into the flask). The flask is then charged with 200 g. dry Br while the cooled dropping funnel is charged with 73 g.  $MeOCH_2CH_3$ . After cooling the Br soln. to  $-7^\circ$  a slow addn. of the ether is begun with good stirring at  $-3$  to  $-5^\circ$ . After completion of addn. the product is distd. yielding 82.8% pure  $BrCH_2CHBrOMe$ ,  $b_p 52^\circ$ ,  $b_n 56^\circ$ ,  $b_d$  about  $160^\circ$  (decompn.),  $d_{20} 1.0701$ ,  $n_D^{20} 1.5100$ . G. M. K.~~

MA  
7-25-54

TYUPAYEV, I. V.

Chem  
③

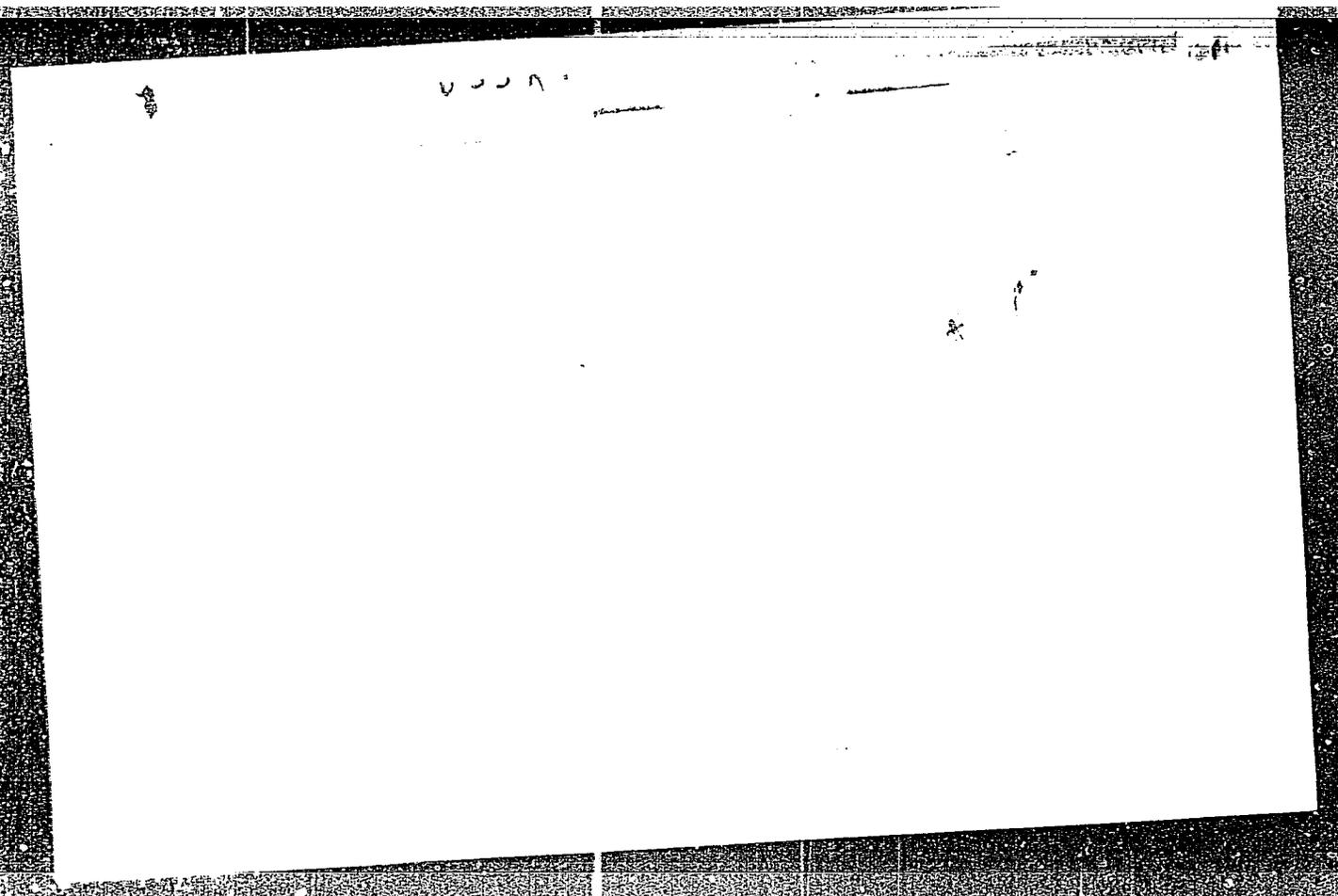
Chem Abo Vys  
1-25-54  
Organic Chemistry

~~Diethyl ether of 1,4-butylene glycol. M. E. Shostakovskii and P. V. Tyupayev. Akad. Nauk S.S.S.R., *Issled. Khim., Sintezy Org. Soedinenii, Sbornik 2*, 85-7 (1952).—Into an autoclave is charged 25 g. KOH in 500 g. (CH<sub>2</sub>CH<sub>2</sub>OH)<sub>2</sub> and C<sub>2</sub>H<sub>4</sub> from the cylinder to 18 atm. (no contact between Ag or Cu parts is permitted). With agitation the app. is heated to 140° 0.5 hr.; when the pressure declines appreciably, the vessel is cooled to 30-40° and again C<sub>2</sub>H<sub>4</sub> is added; this cycle is repeated until reaction ceases. After washing the product 2-3 times with H<sub>2</sub>O it is distd. after drying over K<sub>2</sub>CO<sub>3</sub>, yielding 70% (CH<sub>2</sub>CH<sub>2</sub>OCH<sub>2</sub>CH<sub>2</sub>)<sub>2</sub>, b<sub>25</sub> 73-7° (crude). Pure product, b<sub>25</sub> 75°, b<sub>m</sub> 167-8°, d<sub>20</sub> 0.8986, n<sub>D</sub> 1.4398. The product is subject to thermopolymerization. For complete removal of HO contg. impurities it is best treated in the cold with Na, and distd. from it. G. M. Kpsolapoff~~

NF  
7-19-54

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757730001-0



APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757730001-0"

SHOSTAKOVSKIY, M. F. - BATUEV, M. I. - TIUPAEV, P. Y. - MATVEYEVA, A. D.

Oxonium

Oxonium theory and its optical substantiation on simple vinyl ethers.  
Dokl. AN SSSR 89 no. 1, 1953

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

*Тюпайев, П. В.*  
USSR/Chemistry - Analytical chemistry  
Card 1/2 Pub. 40 - 22/27  
Authors : Shostakovskiy, M. F.; Batuyev, M. I.; Tyupayev, P. V.; and Matveyeva, A. D.  
Title : The oxonium theory and the optical study of the hydrogen bond in some monovinyl ethers of glycols and polyglycols  
Periodical : Izv. AN SSSR. Otd. khim. nauk 6, 1103-1110, Nov-Dec 1954  
Abstract : An optical study was conducted on several monovinyl ethers of liquid glycols and poly glycols to determine whether the valence of the oxygen in these compounds is variable and whether the intermolecular hydrogen bond is stable. The existence of the intermolecular hydrogen bond was also confirmed by other physico-chemical investigations.  
Institution : Acad. of Sc., USSR, The N. D. Zelinskiy Institute of Organ. Chemistry  
Submitted : September 10, 1953

**"APPROVED FOR RELEASE: 08/31/2001**

**CIA-RDP86-00513R001757730001-0**

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**CIA-RDP86-00513R001757730001-0"**

... .. vinyl glycol ethers ... .. 125

**"APPROVED FOR RELEASE: 08/31/2001**

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**APPROVED FOR RELEASE: 08/31/2001**

**CIA-RDP86-00513R001757730001-0"**

TYUPENKO, YA. S.

Afforestation - Chkalov Province

Shelterbelt forestry in the arid steppe of southeastern Chkalov Province. Dost.  
sel'khoz, no. 9, 1952.

9. Monthly List of Russian Accessions, Library of Congress, December <sup>1952</sup> ~~XXIX~~, Uncl.

REVA, K.; TYUPENKO, YA. S.

Chkalov Province - Afforestation

Shelterbelt forestry in the Southeast. Kolkh.proiz. 12 No. 6 1952.

Monthly List of Russian Accessions. Library of Congress October 1952. UNCLASSIFIED.

TYUPENKO, YA. S. REVA, K.

Afforestation

Mechanization of forest belt cultivation. MTS 12, no. 7, Jl. 1952.

9. Monthly List of Russian Accessions, Library of Congress, September 1952 ~~1952~~, Uncl.

TYUPENKO, Ya. S.

"A Test of the Grass-Field System of Agriculture in the Kolkhozes Served by the Model Support MTS imeni V. P. Vil'yams in the Buzulukskiy Rayon of Chkalovskaya Oblast." Cand Agr Sci, Moscow Agricultural Acad imeni Timiryazev, Moscow, 1953. (RZhBiol, No 6, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SO: Sum. No.521, 2 Jun 55

TYUPICH, M., kand. biolog. nauk

How to increase the impregnation rate of cows. Nauka i pered. op.  
v sel'khoz 9 no.10:35-38 0 '59 (MIRA 13:3)

1. Vsesoyuznyy institut zhiivotnovodstva.  
(Cattle breeding)

TYUPICH

USSR/Farm Animals - Cattle.

Q-3

Abs Jour : Ref Zhur - Biol., No 1, 1958, 2567

Author : M.M. Tyupich

Inst : -

Title : Is the Cervical Method of Artificial Insemination of Cows  
Necessary ?

Orig Pub : Zhivotnovodstvo, 1957, No 4, 66-69

Abstract : A critical evaluation of the methods of a cervical and  
uterine artificial insemination of cows. The cervical me-  
thod is suggested as one which simplifies the technique  
and lessens the danger of infection penetrating the uterus.

Card 1/1

Country : USSR  
CATEGORY : Farm Animals. Cattle

ABST. JOUR. : RZBiol., No. 13, 1958, No. 59521

AUTHOR : Tyupich, M. M.  
INST. : All-Union Scientific Research Institute\*  
TITLE : Dosage and Degree of Dilution of Bull Semen  
in Artificial Insemination

ORIG. PUB. : Byul. nauchno-tekhn. inform. Vses. n.-i.  
in-t zhivotnovodstva, 1957, No 1 (3), 30-32

ABSTRACT : Studies showed that if the dosage of semen  
was determined by taking into account the  
number of spermatozoa and their resistance,  
67% of fertilizations were obtained. With  
semen diluted 50 times the fertilization was  
71%. With the dilution of semen 3-5 and 10  
times in a dose of 1 ml. without taking into  
account the resistance of the spermatozoa,  
the fertilization was 40-50%.

\* of Animal Husbandry

CARD: 1/1

TYUPICH, M.M., kand.biolog.nauk; KUZNETSOV, M.P., kand.biolog.nauk

Simple method for determining the pregnancy of cows. Zhivotnovodstvo  
22 no.7:66-68 '60. (MIRA 16:5)  
(Cows) (Pregnancy--Signs and diagnosis)

TYUPIN, A.V.

Recent developments in eliminating sterility in sheep; valuable  
experience of the Zimovniki stock raisers. Zhivotnovodstvo 23  
no.2:49-51 F '61. (MIRA 15:11)

1. Starshiy selektsioner Zimovnikovskogo gosudarstvennogo  
plemennogo rassadnika Rostovskoy oblasti.  
(Rostov Province--Sheep breeding) (Artificial insemination)

J-1

USSR / Soil Science. General Problems.

Abs Jour : Ref. Zhur - Biologiya, No 17, 1958, No. 77361

Author : ~~Trupin, I.V.~~

Inst : Not given

Title : Development of Soil Science in the USSR for 40 Years

Orig Pub : Pochvovedeniye, 1957, No 11, 1-13

Abstract : No abstract given

Card 1/1

Q-2

USSR/Farm Animals. Cattle

Abs Jour : Ref Zhur - Biol., No 19, 1958, No 88079

Author : Tyupich M.M.  
Inst : All-Union Scientific Research Institute of Animal Husbandry  
Title : On the Repetitvity of the Artificial Insemination of Cows

Orig Pub : Byul. nauchno-tekhn. inform. Vses. n.-i. in-t zhivotnovodstva,  
1957, No 2, (4), 3-4

Abstract : On the basis of empirical data it is shown that a single artificial insemination of cows executed in the evening part of the day results in higher fertility (71 percent) than does a double insemination (60 percent).

Card : 1/1

TYUPIN, N.F.; GUTS, V.N.

Sudden outbursts of rock from coal mine dumps. Ugol' Ukr. 7  
no.7:48-49 J1 '63. (MIRA 16:8)

1. Institut Luganskproyekt.  
(Mine gases)

TALEYSNIK, S.L.; TYUPIN, V.M.

Case history of osteogenesis imperfecta tarda. Nov.khir.arkh.  
no.4:70-72 '62. (MIRA 15:5)

1. Donetskii nauchno-issledovatel'skiy institut travmatologii i  
ortopedii.

(OSTEOPSATHYROSIS)

TYUPKIN, S.N., otvetstvennyy red.; KRIKUNOV, L.A., red.; BLOKHA, Ye.Ye., red.;  
RASHKOVSKIY, Ya.Z., red.; SEMENOV, V.A., red.; LOZNEVA, A.A., red.  
izd-va; KANASKOVA, I.R., tekhn.red.

[Uniform conventional symbols for surveying charts and geological maps on scales of 1:200 and 1:10,000; obligatory for all mining enterprises and organizations] Edinye uslovnye oboznachenia dlia marksheyderskikh planov i geologicheskikh razrezov v mashtabakh 1:200 - 1:10,000. Obiazatel'ny dlia vsekh gornodobyvaiushchikh predpriyatii i organizatsii. Moskva, Ugeltekhizdat, 1957. 232 p. 19 diagr. (in portfolio) (MIRA 11:5)

1. Marksheydersko-geologicheskii otdel Tekhnicheskogo upravleniya byvshego Ministerstva ugol'noy promyshlennosti SSSR (for Tyupkin, Krikunov). 2. Otdel marksheyderskogo kontrolya Tekhnicheskogo upravleniya Gosgortekhnadzora SSSR (for Blokha, Rashkovskiy, Semenov)

(Maps--Symbols) (Surveying) (Geology--Maps)