

11 - A

CA

Action of adenosinetriphosphate, isolated from the spermatozoa of mammals, upon actomyosin.  
Ivanov, B. S. Kazavina, and L. D. Fomenko. *Byull. Ekspil. Biol. Med.* 23, 56 8(1947). See C.A. 41, 2764a. G. M. Kosolapoff

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

GROUPS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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11-67

ca

The adenosinetriphosphatase activity of malignant tumor proteins. L. I. Ivanov, B. S. Kasayina, and S. I. Pekttereva (Cancer Biochem. Lab., Acad. Med. Sci., Moscow). *Biochimiya* 13, 310-14(1948).—The present investigation was undertaken to det. whether the adenosinetriphosphatase activity (I) of the water sol. globulin type of structural proteins of malignant tumours changes after repeated pptn. from soln. No loss of I was found after several pptns. of the water-sol. proteins isolated from dibenzanthracene-induced rat sarcoma and from Brown-Pearce rabbit tumours. The I is not due to phosphatase impurities, but depends on special active groups which confer on the proteins an enzymic activity. The decompn. of adenosinetriphosphate by the tumor proteins in 0.3 M KCl was not accompanied by any change in viscosity. H. Priestley

AD-31.4 METALLURGICAL LITERATURE CLASSIFICATION

IVANOV, I. I.

FA 12/49T76

USSR/Medicine - Helminthology  
Medicine - Metabolism

Jul/Aug 48

"Adenosinetriphosphate in Helminths," I. I. Ivanov  
and V. A. Dubova, Biochem Lab, All-Union Inst of  
Helminthol imeni K. I. Skryabin, Moscow, 3 pp

"Biokhimiya" Vol XIII, No 4

The content of adenosinetriphosphate (I) in body  
tissues of the helminths *Ascaris suum* and *Moniezia*  
*expansa* varies between 4-13 mg. percent of readily  
hydrolyzable phosphorus (6-19 mg. percent of I).  
I from helminths does not noticeably differ from I  
from mammalia. It plays an important part in  
helminthic metabolism. Submitted 23 Aug 47.  
12/49T76

IVANOV, I. I. and KISELEVA, Ye. G.

"Antigenic Properties of Actinine of the Transverse Striated Muscles and Some Features of Contractile Albumins of Smooth Muscles," Dokl. AS USSR, 60, No.1, 1948

Experiments and studies to determine whether or not antigenic properties are present in actinine. Following this, authors studied contractile albumin of smooth muscles and some movable cells. Submitted by Acad. L. A. Orbeli 7 Feb 48.  
63T44

PROCESSES AND PROPERTIES INDEX

ca

11f

Comparative biochemical study of the contractile proteins of the transversely striped muscle at various steps of phylo- and onto-genesis. I. I. Ivanov and B. S. Kasavina. *Doklady Akad. Nauk S.S.S.R.* 60, 417-20(1948); cf. preceding abstract.—Study of contractile proteins of the muscle of embryo and new-born animals of various types (guinea pigs, rats, and mice) showed that those of the new-born rats and mice differ from the actomyosin solns. obtained from adult animals. Addn. of adenosine triphosphate lowers their relative viscosity by only 10% or less. Extrusion of the soln. into water either does not produce threads or leads to threads which are not affected by adenosine triphosphate; neither do these proteins combine with actin. Conversely, guinea pigs, either newly born or in late embryo stage, have definite actomyosin properties in their contractile muscle, as shown by viscosity and contraction of threads under action of adenosine triphosphate. A few individual rats or mice also gave active proteins, but they were apparently exceptional cases. This behavior may be related to the state of relative development of these animals at birth. It is also possible to isolate typical actomyosin from the transverse-striped insect muscle (legs of black cockroach); the product gives contractile threads and lowers its viscosity under action of adenosine triphosphate. G. M. K.

A 58-51.4 METALLURGICAL LITERATURE CLASSIFICATION

GROUP	SECTION	SUBSECTION	TERMINAL INDEX
A	58	51.4	

USSR/Chemistry - Glycolysis, Coenzyme of AUG 49  
TUMORS

"The Mechanism Explaining the Inactivation of  
the Coenzyme of Glycolysis by Protein Extracts  
from Malignant Tumors of Man," I. I. Ivanov,  
B. I. Palkitova, M. I. Tsindler, Lab of Can-  
cer Chem, Acad Sci USSR, 3 3/4 pp

"Dok Ak Nauk SSSR" Vol LXVII, No 6  
Established the presence of a particular ther-  
molabile substance combining with the coenzyme  
in extracts from spontaneous malignant human  
tumors (cancer of the stomach, mammary gland,  
1/50714

USSR/Chemistry - Glycolysis, Coenzyme of AUG 49  
(Contd)

caecum). In extracts from benign human tumors  
(fibroma or cysts) no substance was observed to  
combine with the coenzyme. Submitted by Acad  
A. V. Palkitov 16 Jun 49.

1/50714

IVANOV, I. I.

CA

119

Mechanism of the inactivation of glycolysis by protein extracts from cancer tissues. I. I. Ivanov, S. I. Prkhterova, and N. O. Zateishchikova (Acad. Med. Sci., U.S.S.R.). *Biochimiya* 14, 503 (1949). The inability of an ext. from cancer tissues to ferment sugars and glycerol to form lactic acid had been ascribed to destruction of cozymase in the tissues by the special enzyme nucleoklasin (Boydland, Boydland, and Greville, C.A. 51, 4710). However, cozymase is present in the cancer tissue exts. in an inactive form, apparently combined with a protein. On boiling the cancer tissue exts., free cozymase is liberated. Unboiled cancer tissue exts. retard the glycolytic activity of muscle juice, since the cancer protein combines with the muscle cozymase and inactivates it. Cozymase added to cancer tissue exts. is not destroyed. H. Priestley

THE LAB. OF BIOCHEM. OF CANCER OF THE ACADEMY OF MED. SCIENCES, USSR

3  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1  
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z AA AB AC AD AE AF AG AH AI AJ AK AL AM AN AO AP AQ AR AS AT AU AV AW AX AY AZ BA BB BC BD BE BF BG BH BI BJ BK BL BM BN BO BP BQ BR BS BT BU BV BW BX BY BZ CA CB CC CD CE CF CG CH CI CJ CK CL CM CN CO CP CQ CR CS CT CU CV CW CX CY CZ DA DB DC DD DE DF DG DH DI DJ DK DL DM DN DO DP DQ DR DS DT DU DV DW DX DY DZ EA EB EC ED EE EF EG EH EI EJ EK EL EM EN EO EP EQ ER ES ET EU EV EW EX EY EZ FA FB FC FD FE FF FG FH FI FJ FK FL FM FN FO FP FQ FR FS FT FU FV FW FX FY FZ GA GB GC GD GE GF GG GH GI GJ GK GL GM GN GO GP GQ GR GS GT GU GV GW GX GY GZ HA HB HC HD HE HF HG HH HI HJ HK HL HM HN HO HP HQ HR HS HT HU HV HW HX HY HZ IA IB IC ID IE IF IG IH II IJ IK IL IM IN IO IP IQ IR IS IT IU IV IW IX IY IZ JA JB JC JD JE JF JG JH JI JJ JK JL JM JN JO JP JQ JR JS JT JU JV JW JX JY JZ KA KB KC KD KE KF KG KH KI KJ KL KM KN KO KP KQ KR KS KT KU KV KW KX KY KZ LA LB LC LD LE LF LG LH LI LJ LK LL LM LN LO LP LQ LR LS LT LU LV LW LX LY LZ MA MB MC MD ME MF MG MH MI MJ MK ML MN MO MP MQ MR MS MT MU MV MW MX MY MZ NA NB NC ND NE NF NG NH NI NJ NK NL NM NO NP NQ NR NS NT NU NV NW NX NY NZ OA OB OC OD OE OF OG OH OI OJ OK OL OM ON OO OP OQ OR OS OT OU OV OW OX OY OZ PA PB PC PD PE PF PG PH PI PJ PK PL PM PN PO PP PQ PR PS PT PU PV PW PX PY PZ QA QB QC QD QE QF QG QH QI QJ QK QL QM QN QO QP QQ QR QS QT QU QV QW QX QY QZ RA RB RC RD RE RF RG RH RI RJ RK RL RM RN RO RP RQ RR RS RT RU RV RW RX RY RZ SA SB SC SD SE SF SG SH SI SJ SK SL SM SN SO SP SQ SR SS ST SU SV SW SX SY SZ TA TB TC TD TE TF TG TH TI TJ TK TL TM TN TO TP TQ TR TS TT TU TV TW TX TY TZ UA UB UC UD UE UF UG UH UI UJ UK UL UM UN UO UP UQ UR US UT UU UV UW UX UY UZ VA VB VC VD VE VF VG VH VI VJ VK VL VM VN VO VP VQ VR VS VT VU VV VW VX VY VZ WA WB WC WD WE WF WG WH WI WJ WK WL WM WN WO WP WQ WR WS WT WU WV WW WX WY WZ XA XB XC XD XE XF XG XH XI XJ XK XL XM XN XO XP XQ XR XS XT XU XV XW XX XY XZ YA YB YC YD YE YF YG YH YI YJ YK YL YM YN YO YP YQ YR YS YT YU YV YW YX YY YZ ZA ZB ZC ZD ZE ZF ZG ZH ZI ZJ ZK ZL ZM ZN ZO ZP ZQ ZR ZS ZT ZU ZV ZW ZX ZY ZZ

PROCESSES AND PROPERTIES INDEX

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11F

The nature of interaction of adenosine triphosphate with actomyosin. J. I. Lymov and T. I. Ivanova. *Doklady Akad. Nauk S.S.S.R.* 66, 895-8(1949). Actomyosin fibers treated with adenosine triphosphate (ATP) become more dense and opaque (in the course of contraction) and also become more extensible (100-200% extension is possible, with relaxation upon load removal almost to original size). Treatment of a fiber with ATP while under near-breaking tension causes increase of "density" of the fiber (with characteristic "crocodile" surface), accompanied by loss of some water content and increase of extensibility. The extension characteristic of the fiber treated by ATP is very similar to that obtained from denaturation treatment with CuSO<sub>4</sub>. The primary reaction of actomyosin gel to ATP is contraction based on syneresis of the protein gel accompanied by dehydration of the micelles. G. M. Kosolapoff

COMMON AVIABILITY CODES

OPEN

MATERIALS INDEX

ASM-51A METALLURGICAL LITERATURE CLASSIFICATION

1304 174 03.74

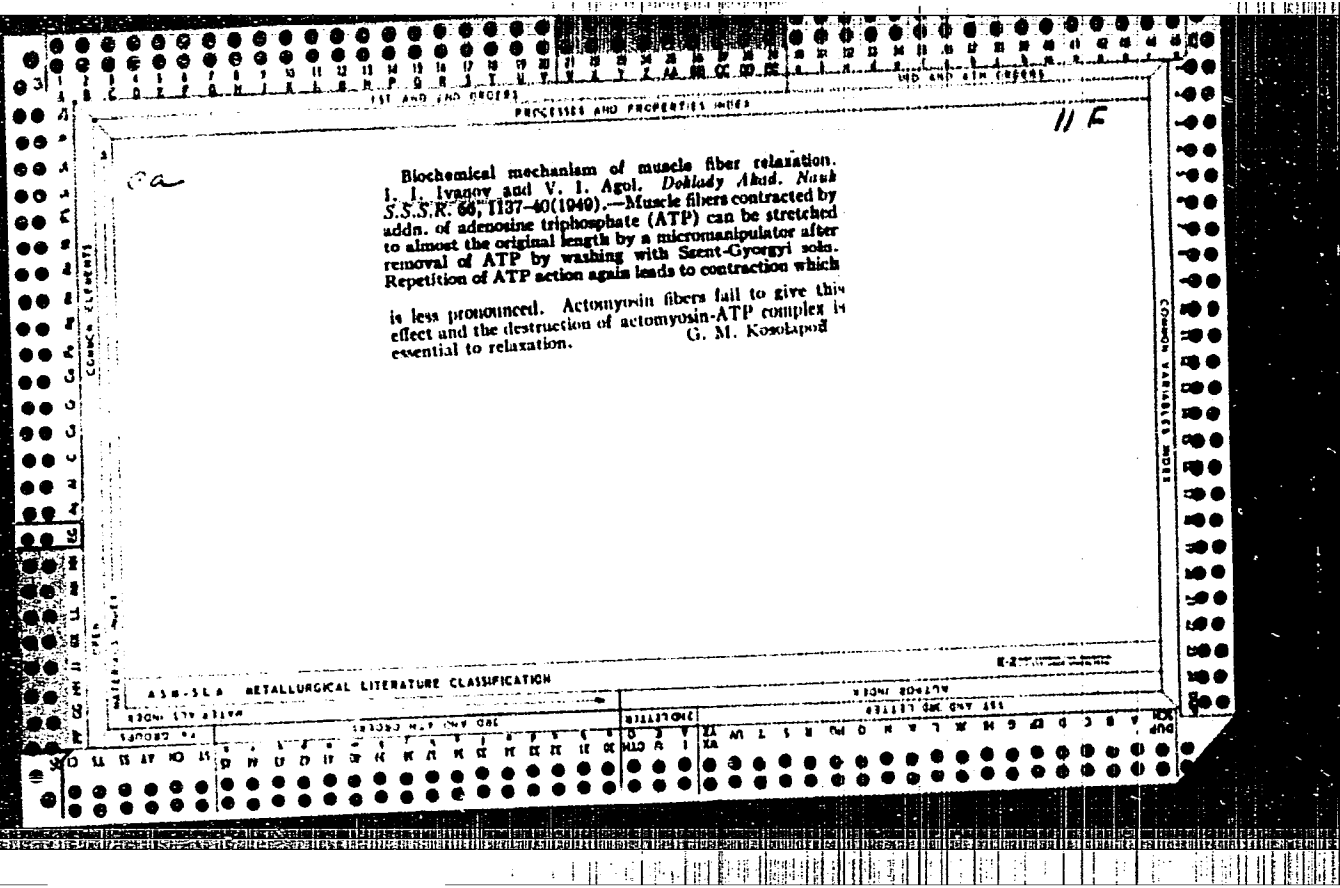
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10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

0 1 2 3 4 5 6 7 8 9 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

0 1 2 3 4 5 6 7 8 9 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z





*Pathology & Immunology*

Inactivation of glycolysis co-enzyme by protein extractives from malignant human tumours. I. I. Ivanov, S. I. Pehtereva, and M. L. Tumbler (*C. R. Acad. Sci. U.R.S.S.* 1949, 67, 1085-1088).—Respiration in the systoma muscle extract—Ringer solution—glycogen—adenosinetriphosphate is inhibited by addition of sq. extracts of mammary gland, intestinal, or gastric carcinomata, whereas addition of bulel extracts augments respiration. Extracts of benign tumours (ovarian cyst, uterine fibroma, mammary fibroadenoma) are without action. Incubation of the malignant tissue extracts (24 hr. at 37°) before addition does not affect the results, showing that enzymic decomposition of co-enzyme has not occurred. It is concluded that malignant tissues contain a thermolabile protein which reversibly inactivates the co-enzyme.

R. Tauscoz.

IVANOV, I.I.

Proteins of the actomyosin complex. Uspekhi Biol. Khim. 1, 179-202  
'50. (MIRA 5:8)  
(CA 47 no.14:7008 '53)

CA

18

The amino acid composition of actin. I. I. Ivanov and E. N. Asmolova (First Moscow Med. Inst.). *Biokhimiya* 15, 201-3(1980); cf. C.A. 43, (1955).—The actin from rabbit muscle contained 13.8-14.7% N. Lysine, arginine, histidine, glutamic acid, and aspartic acid were detd. by enzymic decarboxylation. The amino acid N in % of the total N was: arginine 14.3-14.6, aspartic acid 5.85, glutamic acid 9.3, histidine 4.0-4.1, lysine 10.25, tryptophan 1.7-1.9, phenylalanine absent or trace, tyrosine 2.1, methionine 2.4-2.95, cystine 0.81-0.83. H. P.

THE CHAIR OF BIOCHEM. OF THE FIRST MOSCOW ORDER OF LENIN MED. INST. AND THE LAB. OF THE BIOCHEMISTRY OF CANCER OF THE ACADEMY OF MED. SCIENCES, USSR., MOSCOW

Chemical Abstracts  
Vol. 48 No. 5  
Mar. 10, 1954  
Biological Chemistry

Data on the energetics of contraction and relaxation of washed muscle fibers. I. I. Ivanov (1st Med. Inst., Moscow). *Ukrain. Biokhim. Zhur.* 22, 393-9(1950) (in Russian); cf. *C.A.* 43, 8499f.—Relaxation of muscle involves conversion of the elastic modification of myosin to the nonelastic form, during which process adenosinetriphosphate is split. Clayton F. Holoway

②

IVANOV, I. I.

Chemical dynamics of the muscles and contractile fiber cells.  
Moskva, Medgiz, 1950. 253 p.

DAFM

1. Metabolism. 2. Muscles - Abnormities and deformities. 3. Elastic tissue.

ZBARSKIY, B.I.; IVANOV, I.I.; MARDASHEV, S.R.; SMIRNOVA, L.G.,  
redaktor; KARASIK, N.P., tekhnicheskiiy redaktor

[Biological chemistry] Biologicheskaya khimiya. Moskva, Gos.  
izd-vo meditsinskoi lit-ry, 1951. 611 p. (MLRA 8:10)  
(Biochemistry)

CA

11 B

Action of high pressure on myosin and water-soluble adenosinetriphosphatase. I. I. Ivanov and T. I. Ivanova (1st Moscow Med. Inst.). *Doklady Akad. Nauk S.S.S.R.* 77, 657-660(1951).—Evidence is collected supporting possible identity of myosin and adenosinetriphosphatase (I) (water-sol.), with 10 references. Application of 4000 atm. pressure leads to complete denaturation of myosin in 10 min. and its enzymic properties are completely lost. The water-sol. I and potato I, however, retain their enzymic properties without change under this treatment. This may lead to division of proteins into 2 groups—pressure-stable and pressure-unstable; among the latter are myosin and actomyosin. Hence the concept of myosin being a complex of myosin proper on which water-sol. I is adsorbed does not appear founded on fact. Proteins of malignant growths in contrast to myosin are stable to 4000 atm. pressure and retain their enzymic properties, which arise apparently from adsorbed cytoplasmic I.  
G. M. Kosolapoff

1951



Biological Chemistry, Biochemistry of Animals (13003)

Vopr. Med. Khimii, Vol. 6, 1953, pp 45-47

Ivanov, I. I.; Gerasimova, A. V.; Tsimbler, K. L.

Protein Composition of Muscle Plasma

Viscosity of muscle plasma is not lowered in the presence of KCl when ATP is added.  
Proteins present in muscle plasma do not react with actin to form actomyosin.

SO: Referativnyy Zhurnal -- Khimiya, No. 2, 1954 (W-30907)

IVANOV, I. I.

The Committee on State Prizes for the Council of Ministers of the USSR and the Ministry of Science and Literature announced that the following scientific works, popular scientific books, and textbooks have been nominated for competition for State Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, Nov. 27-30, 28 Feb. - 3 Apr 1954)

<u>Name</u>	<u>Title of Work</u>	<u>Nominated by</u>
Zbarskiy, B. I. Mardashev, S. R. <u>Ivanov, I. I.</u>	"Biological Chemistry" (textbook)	Bureau of Biochemical Section of Moscow Society of Physiologists, Biochemists, and Pharmacologists

CGA W-30004, 7 July 1958

IVANNOV, I. I.

*Ivan* Ivanov, I. I., et al.: Radioaktivnye izotopy v medicine i biologii: Prakticheskoe rukovodstvo (Radioisotopes in Medicine and Biology: Practical Handbook). Moscow: Medgiz, 1959. 231 pp.

— v. 1/18  
ZBARSKIY, B.I.; IVANOV, I.I.; MARDASHEV, S.R.; KAPLANSKIY, S.Ya., re-  
daktor; BOBHOVA, Ye.S., tekhnicheskiiy redaktor.

[Biochemistry] Biologicheskaya khimiya. 2-e izd. Moskva, Gos.  
izd-vo med. lit-ry, 1954. 618 p. [Microfilm] (MLRA 7:11)  
(Biochemistry)

IVANOV, I. I.; ZBARSKIY, B. I.; and MARDASHEV, S. R.

"Current USSR Theories on Action of Chemical Mediators in Transmission of Nerve Impulses," Biol. Khim., 619 pages, Medgiz, Moscow, 1954

Summary - W-31274, 20 May 55

*IVANOV, I. I.*

EXCERPTA MEDICA Sec.2 Vol.9/11 Physiology, etc. Nov56

4999. IVANOV I. I. and TORTCHINSKIY Yu. M. Dept. of Biochem., 1st Med. Inst., Moscow; Dept. of Radiation, Centr. Inst. for Med. Specialist Training, Moscow. \*The nature of the contraction of actomyosin and 'sheet' actomyosin fibres under the influence of adenosine triphosphate (Russian text) BIOKHIMIJA 1955, 20/3 (328-335)

Shortening of ordinary actomyosin fibres, or of 'sheet' fibres prepared by the method of Hayashi, is closely connected with partial dehydration of a gel. The less the water in the gel, the less its ability to shorten in reaction with ATP. Increased strength and elasticity of the fibres under the influence of chemical agents or of partial drying by the method of Portzehl is due to partial denaturation of the contracting fibres and is accompanied by some loss of shortening power. The orientation of the actomyosin micelles along the axis of the fibre does not cause greater shortening of the fibre or increased speed of this process. The mechanism of shortening of the 'sheet' fibre does not differ from that of actomyosin gels in the presence of ATP.

Leicester - San Francisco, Calif.

IVANOV, I. I.

The constituent fractions of proteins of the smooth muscles of vertebrates. I. I. Ivanov and V. D. Bishchina. *Biokhimiya* 20, 292-6 (1955). Both muscles of the stomachs of pigeons, rabbits, and dogs were used in all cases. Chest muscles of the pigeons and thigh muscles of the dogs and rabbits were used for expts. with striated muscles. Electrophoretic sepa. of protein constituents was used. In the proteins of the smooth muscles of the stomach of the pigeon 4 constituents were found: Fraction I, corresponding to peak I, representing 9% of the sol. proteins; fraction II (peak II), approximately 42%; fraction III (peak III), near 20%, and fraction IV (peak IV), near 29% of the sol. proteins. Results obtained with the proteins of the stomach muscle of the rabbits and dogs were practically identical with the above. The proteins of the actomyosin complex are present in the smooth muscles of vertebrates in comparatively small amts. and appear to be constituents of fraction II. The physicochemical const. of I, III, and IV have not been investigated. The results obtained strengthen the assumption previously forwarded (Krim. *Dinamika Aktyva i Podvuznykh Kletok*; Moscow 1950; *Byull. Eksp. Biol. i Med.* 1947, 831) that a protein constituent other than actomyosin forms the substrate of smooth muscle tonicity in vertebrates. B. S. Lyvina

*JAMC*

*V* 7608

RADIOACTIVE ISOTOPES IN MEDICINE AND BIOLOGY (U)

V. K. Modestov, I. I. Ivanov, Yu. M. Shtukenberg, S. F.

Romanov, and E. E. Yatskov. Moscow, Medits, 1965.

(In Russian) (Book on display at Geneva Conference)

A practical guide for physicians and biologists working with radioactive isotopes. Part I contains elementary data on nuclear physics, deals with the problems of the interaction between radiation and substance, and with measurement techniques. Part II dwells on the use of radioactive isotopes for tagging. The concluding chapters contain data on protection against radioactivity and on equipping laboratories. Supplements for reference purposes are attached. (publisher's note)

*Smith*

(U)

*of*



IVANOV, I. I.

Obmen Veshchestv pri Luchevoy Bolezni (Metabolism in Radiation Sickness), by Prof I. I. Ivanov, V. S. Balabushka, Ye. F. Romantsev, and T. A. Fedorova, Moscow, Medgiz, 1956, 251 pp

The table of contents of this book is as follows:

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Both Soviet and foreign works are cited. (U)	

54M.1360

2748. IVANOV I. I., YURIEV V. A., KADYSHEV V. V., KRYMSKAYA B. M., MOISSEVA V. P. and TUKACHINSKY S. E. *An electrophoretic study of the fractional composition of the skeletal muscles of vertebrates in ontogenesis (Russian text)* Biokhimija 1956, 21/5 (591—595) Graphs 9 Tables 1 Illus. 2

Profound changes occur during the embryonic and early postnatal period of development in the fractional composition of proteins of striated muscles. These consist in a gradual enrichment of the 'actomyosin' fraction whose precursors are obviously the proteins of the 'proactomyosin complex'. As regards the protein content of the actomyosin complex the embryonic muscles are close to smooth vertebrate tonic muscles of mesenchymal origin, and this agrees with the physiological type of their contractile reactions as well.

USSR/Human and Animal Physiology - Metabolism.

V-2

Abs Jour : Ref Zhur - Biol., No 1, 1958, 3657

Author : I.I. Ivanov, V.A. Yur'yev, V.V. Kadykov, B.M. Krymskaya,  
V.P. Morseyeva, S.Ye. Tukachinskiy

Inst : Academy of Sciences, USSR

Title : Proteins of the Proactomyosin Complex in Ontogeny.

Orig Pub : Dokl. AN SSSR, 1956, 111, No 3, 649-651

Abstract : The fractional composition of proteins in the somatic muscles of rabbits at various stages of embryonic and post-natal development was studied by means of free electrophoresis and paper electrophoresis. There was a great difference in the fractional composition of muscular proteins between embryonic and new-born rabbits, on one hand, and adult animals on the other hand. The contracting capacities of the proteins corresponded to

Card 1/2

USSR/Human and Animal Physiology - Metabolism.

V-2

Abs Jour : Ref Zhur - Biol., No 1, 1958, 3657

the particularities of their composition. In presence of ATF [ATP ?], the contracting ability of protein fibers from muscle proteins is the less pronounced the younger is the animal. Therefore, there is - in ontogeny - a gradual change of the fractional composition of the striated muscle proteins towards an increase of the actomyosin fraction, which is formed from the "proactomyosin complex".

Card 2/2

DOMSHIAK, M.P.; IVANOV, I.I.; BELGUSOVA, O.I.; YAKOVLEV, V.G.

Biological radiation protection in experimental radiotherapy of  
tumors. Med.rad. 2 no.3:47-52 My-Je '57. (MLRA 10:10)

(RADIATION PROTECTION, exper.

by cysteine & sodium cyanate in radiother. of exper.  
tumors in rats)

(CYSTEINE, eff.

in radiation protection in radiother. of exper. tumors  
in rats, with sodium cyanate)

(CYANATES, eff.

sodium cyanate in radiation protection in radiother. of  
exper. tumors in rats, with cysteine)



USSR/Human and Animal Physiology (Normal and Pathological).  
Nerve and Muscle Physiology.

T

Abs Jour: Ref Zhur-Biol., No 17, 1958, 79912.

Author : Strelina, A.V ; Ivanov, I.I.; Zhukov, Ye. K.

\* Inst :

Title : On the Peculiarities of Contracted Proteins of the  
Skeletal Muscles of Fibers of Different Types.

Orig Pub: Fiziol. zh. SSSR, 1957, 43, No 4, 351-357.

Abstract: In the tonic cluster of the iliac-peroneus muscle  
of the frog, the tonic and phase working fibers  
were isolated. With a rate of stimulation of 5 pul/  
sec, the tetany fiber gave no unified contraction,  
but rather a series of discreet single contractions.  
In relation to ATP, muscle structures can be divided

Card : 1/3

\* КАФЕДРА БИОХИМИИ ЛЕНИНГРАДСКОГО ПАДИТРИЧЕСКОГО МЕДИЦИНСКОГО  
ИНСТИТУТА И ЛАБОРАТОРИИ ЭВОЛЮЦИОННОЙ ФИЗИОЛОГИИ ЛЕНИНГРАДСКОГО  
ГОСУДАРСТВЕННОГО УНИВЕРСИТЕТА.

*Ivanov, I. I.*

20-4-36/60

**AUTHORS** Ivanov, I.I. and Pinayev G.P.

**TITLE** On the Mechanism of Contraction and Spontaneous Relaxation of Glycerin Models of Myofibrillae.  
(O mekhanizme sokrashcheniya i samoproizvol'nogo rasslableniya glitserinovykh modeley myshechnykh volokon.)

**PERIODICAL** Doklady Akademii Nauk SSSR, 1957, Vol. 115, Nr 4, pp. 763-764 (USSR)

**ABSTRACT** During their work with muscle fibrils macerated in water glycerin media (prepared according to Bendall) the authors made an interesting discovery. It was found that in several cases fibers that were not completely lixiviated by 50% glycerin posses the capacity to relax spontaneously at a certain load and a certain thickness of the bundle upon addition of ATF and after contraction. Sometimes they contract thereafter and relax again. For this a reduction in load is necessary. Sometimes the models are damaged in the course of expansion and lose part of their contractility. Although several authors mention the possibility of this phenomenon and even noticed it, none of them gave a somewhat clear explanation for it. The authors believe that the relaxation has something in common with the flickering motion of the contractile parts of the cell models of

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20-4-36/60

models of Myofibrillae.

**APPROVED FOR RELEASE: 08/10/2001** **CIA-RDP86-00513R000619030007-5**

glycerin (Hoffmann-Berling).  
relaxation of a fibril in an ATF solution can only be explained as follows: The ATF - acitivity of a muscle fibril etc. apparently decreases on contraction and increases on relaxation. This creates the possibility of a periodic contraction and relaxation of the contractile protein in the same medium which contains ATF, when there exists a force that extends the fibril or correspondingly causes the reexpansion of the motion "organelle". There are 1 table and 4 Slavic references.

**ASSOCIATION:** Leningrad Pediatric Medical Institute.  
(Leningradskiy pediatricheskiy meditsinskiy institut)

**SUBMITTED:** May 3, 1957.

**PRESENTED:** By V.A. Engel'gardt, Academician, May 9, 1957

**AVAILABLE:** Library of Congress.

CARD 2/2

YAKOVLEV, V.G., IVANOV, I.I.

Chemical protection of animals from the effect of roentgen rays  
[with summary in English]: Med.rad. 3 no.5:14-20 8-0 '58  
(RADIATION PROTECTION, (MIRA 11:12)  
by cyanides & cysteine in rats (Rus))  
(CYANIDES, eff.  
radiation protection in rats (Rus))  
(CYSTEINE, eff.  
same (Rus))

STEPANOVA, M.M., IVANOV, I.I.

Vitamin C and aromatic amino acid metabolism in radiation sickness [with summary in English]. Vop.med.khim. 4 no.5: 370-372 S-0 '58 (MIRA 11:11)

1. Kafedra biologicheskoy khimii Leningradskogo pediatricheskogo meditsinskogo instituta.

(VITAMIN C, in urine,

eff. of x-rays (Rus))

(AMINO ACIDS, in urine,

aromatic, eff. of x-rays (Rus))

(ROENTGEN RAYS, effects,

on urinary aromatic amino acids & vitamin c (Rus)))

MIKHAYLOVSKAYA, L.A., kand.biol.neuk, NOVOZHILOV, D.A., prof. IVANOV, I.I., prof.

Biochemical studies of the muscle in poliomyelitis and their significance for the clinician. Ortop.travm. i protez. 19 no.3:28-32 My-Je '58

(MIRA 11:7)

1. Iz nauchno-issledovatel'skogo detskogo ortopedicheskogo instituta im. G.I. Turnera i kafedry biokhimii Leningradskogo pediatricheskogo neditainskogo instituta.

(POLIOMYELITIS, pathol.

musc., biochem. changes (Rus))

(MUSCLE, pathol.

in poliomyelitis, biochem. changes (Rus))

IVANOV, I.I.; YUR'YEV, V.A.; NOVOZHILOV, D.A.; MIKHAYLOVSKAYA, I.A.;  
KRYMSKAYA, B.M.

Biochemical determination of the functional condition of muscles in  
poliomyelitis. Vop.med.khim. 5 no.4:243-250 J1-Ag '59.

(MIRA 12:12)

1. Kafedra biokhimii Leningradskogo pediatricheskogo meditsinskogo  
instituta i biokhimicheskaya laboratoriya Nauchno-issledovatel'skogo  
detskogo ortopedicheskogo instituta imeni G.I. Turnera.  
(POLIOMYELITIS pathol.)  
(MUSCLE PROTEINS)

IVANOV, I.I.; PARSHINA, E.A.; MIROVICH, N.I.

Adenosinetriphosphatase activity and contractile properties of  
myosin. Biokhimiia 24 no.2:248-252 Mr-Apr '59. (MIRA 12:7)

1. Biochemical Laboratory, Institute of obstetrics and gynecology,  
Academy of Sciences of the U.S.S.R., and Chair of Biochemistry of  
the Pediatric Medical Institute, Leningrad.

(MUSCLE PROTEINS,

myosin, ATPase activity & contractile properties (Rus))

(ADENYLYPYROPHOSPHATASE,

in myosin (Rus))

IVANOV, I.I.; ZHAKHOVA, Z.N.; ZINOV'YEVA, I.P.; MIROVICH, N.I.; MOISEYEVA, V.P.;  
PARSHINA, E.A.; TUKACHINSKIY, S.Ye.; YUR'YEV, V.A.

Fractional composition of proteins and contractile function  
of various muscle types. Biokhimiya 24 no.3:451-458 My-Je  
'59. (MIRA 12:9)

1. Biochemical Laboratory of the Institute of Obstetrics and  
Gynecology, Academy of Medical Sciences of the U.S.S.R., Chair  
of Biochemistry of the Pediatric Medical Institute, and the  
Institute of Blood Transfusion, Leningrad.

(MUSCLE PROTEINS,

fractional composition, eff. on musc. con-  
traction (Rus))



IVANOV, I.I.; MIROVICH, N.I.; PARSHINA, E.A.

Effect of high pressure on the adenosinotriphosphatase activity of myosin. Biul.eksp.biol. i med. 47 no.6:38-40 Je '59.

(MIRA 12:8)

1. Iz biokhimicheskoy laboratorii Instituta akusherstva i ginekologii AMN SSSR kafedry biokhimii Leningradskogo pediatri-cheskogo meditsinskogo instituta. Predstavlena deystvitel'nyy chlenom AMN SSSR S.Ye.Severinym.

(MUSCLE PROTEINS,

myosin, eff. of high pressure on ATPase activity (Rus))

(ADENILPYROPHOSPHATASE,

in myosin, eff. of high pressures (Rus))

(ATMOSPHERIC PRESSURE, eff.

on myosin ATPase activity (Rus))

IVANOV, I.I.; KODYKOV, V.V.; YUR'YEV, V.A.

Globulin X as a separate protein. *Biul. eksp. biol. i med.* 48  
no.7:46-50 J1 '59. (MIHA 12:10)

1. Iz kafedry biokhimii Leningradskogo pediatricheskogo meditsin-  
skogo instituta. Predstavlena deystvitel'nym chlenom AMN SSSR  
V.M. Orekhovichem.

(GLOBULINS)

IVANOV, I.I.; MIROVICH, N.I.

Actin content of the myometrium. *Biul. eksp. biol. i med.* 48 no.9:  
67-70 S '59. (MIRA 13:1)

1. Iz Biokhimicheskoy laboratorii (zaveduyushchiy - prof. I.I. Ivanov)  
Instituta akusherstva i ginekologii (direktor - chlen-korrespondent  
AMN SSSR prof. P.A. Beloshapko) AMN SSSR, Leningrad. Predstavlena dey-  
stvitel'nyy chlenom AMN SSSR S.R. Mardashevym.  
(MUSCLE PROTEINS chem.)  
(UTERUS chem.)

IVANOV, I.I.; GAYTSKHOKI, V.S.; KORKHOV, V.V.

Effect of roentgen rays on the motor function of contractile proteins of mobile cells. *Biol. eksp. biol. i med.* 48 no.12:47-50 D '59. (MIRA 13:5)

1. Iz laboratorii biokhimii (zav. - prof. I.I. Ivanov) Instituta akusherstva i ginekologii (dir. - chlen-korrespondent AMN SSSR P.A. Beloshapko) AMN SSSR, Leningrad. Predstavlena deystvitel'nyim chlenom AMN SSSR S.Ye. Severinym.  
(SPERMATOZO& radiation eff.)  
(MUSCLE PROTEINS)

ZBARSKIY, Boris Il'ich [deceased]; IVANOV, Il'ya Il'ich; MARDASHEV,  
Sergey Rufovich; DEBOV, S.S., red.; BEL'CHIKOVA, Yu.S.,  
tekh.n.red.

[Biological chemistry] Biologicheskaya khimiya. Izd.3., ispr.  
i dop. Moskva, Gos.izd-vo med.lit-ry, 1960. 489 p. (MIRA 13:9)

(BIOCHEMISTRY)

KVASOV, D.G., prof., otv. red.; IVANOV, I.I., prof., red.; SHUTOVA, N.T.,  
prof., red.; KOROVINA, M.V., kand. med. nauk, red.; TSIPER-  
SON, Z.S., tekhn. red.

[Problems in the general and age-related physiology of the  
nervous system] Voprosy obshchey i vozrastnoy fiziologii  
nervnoy sistemy. Pod red. D.G.Kvasova. Leningrad, 1960.  
200 p. (MIRA 14:5)

1. Peditricheskoy meditsinskiy institut. 2. Kafedra nor-  
mal'noy fiziologii Leningradskogo peditricheskogo meditsin-  
skogo instituta (for Kvasov, Korovina)  
(NERVOUS SYSTEM)

IVANOV, I.I.; MIROVICH, N.I.

Protein fractions in the skeletal musculature of the rabbit  
following section of the spinal cord. Vop.med.khim. 6 no.4:  
403-407 Ji-Ag '60. (MIRA 14:3)

1. Biochemical Laboratory of the Institute for Obstetrics and  
Gynecology, the U.S.S.R. Academy of Medical Sciences, Leningrad.  
(MUSCLES) (PROTEINS) (SPINAL CORD—SURGERY)

SOLOV'YEV, A.L.; SHENSTNEV, A.E.; IVANOV, I.I.; PARSHIN, A.N.; GORYUKHINA,  
T.A.

Some data and considerations on possible means of chemotherapy for  
melanomas. Vop. onk. 6 no.6:88-89 J<sub>8</sub> '60. (MIRA 14:3)  
(TUMORS) (TYROSINE) (CARBON--ISOTOPES)



IVANOV, I.I.; BERG, Yu.N.; LEBEDEVA, N.A.

Changes caused by high pressure in certain properties of myosin,  
actomyosin and actin. Biokhimiia 25 no. 3:505-510 My-Je '60.  
(MIRA 14:4)

1. Chair of Biochemistry, the Pediatric Medical Institute, Leningrad.  
(MYOSIN)

IVANOV, I.I.; ~~AKBENOVA, N.N.~~ (Khor'kova); SUVOROVA, L.V.

Effect of irradiation on the structural viscosity of desoxyribonucleic acid of the rat liver in ontogenesis. Biokhimiia 25 no.5: 865-872 9-0 '60. (MIRA 14:1)

1. Chair of Biochemistry and Chair of Histology, Pediatric Medical Institute, Leningrad.  
(LIVER) (DESOXYRIBONUCLEIC ACID metabolism)  
(X RAYS—PHYSIOLOGICAL EFFECT)

BELOSHAPKO, P.A.; IVANOV<sup>o</sup> I.I.; MAIZEL', Ye.P.

Clinical and experimental data on the problem of sterility  
in marriage. Akush.i gin. 36 no.1:31-35 Ja-F '60. (MIRA 13410)

(STERILITY)

IVANOV, I. I., BERG, YU. N., LEBEDEVA, N. A., LOPATINA, N. I.,  
MIROVICH, N. I., TUKACHINSKIY, S. Y., YUR'YEV, V. A., and ZHAKHOVA, Z. N.  
(USSR)

"Proteins of various Muscle Myofibrils and the Problem of Tone."

Report presented at the 5th International Biochemistry Congress, Moscow,  
10-16 Aug 1961

IVANOV, Il'ya Il'ich; YUR'YEV, Vladimir Anatol'yevich; PARSHIN, A.N., red.;  
CHUNAYEVA, Z.V., tekhn. red.

[Biochemistry and pathobiochemistry of muscles] Biokhimiia i patobio-  
khimiia myshts. Leningrad, Gos. izd-vo med. lit-ry Medgiz, 1961.  
274 p. (MIRA 14:8)

(BIOCHEMISTRY) (MUSCLE)

IVANOV, I.I.; MIROVICH, N.I.; ZHAKHOVA, Z.N.; TUKACHINSKIY, S.Ye.

Water-soluble myofibril proteins of the myometrium. Vop. med.  
khim. 7 no.4:384-390 J1-Ag '61. (MIRA 15:3)

1. Laboratory of Biochemistry of the Institute of Obstetrics  
and Gynecology of the Academy of Medical Sciences of the  
U.S.S.R. and Biophysical Laboratory of the Leningrad Institute  
of Blood Transfusion.

(MUSCLE)

(UTERUS)

(PROTEINS)

IVANOV, I.I.; SOLOV'YEV, A.L.; GAVRILENKO, I.S.

Tyrosinase test and its possibilities in the study of antimelanin properties of bis( $\beta$ -chloroethyl) amino derivatives of pyrocatechol and tyrosine. Vop. onk. 10 no.6:82-84 '64.

(MIRA 18:3)

1. Kafedra biokhimii (zav. - chlen-korrespondent AMN SSSR prof. I.Ivanov) Voyenno-meditsinskoy ordena Lenina akademii imeni S.M.Kirova. Adres avtorov: Leningrad, K-9, Pirogovskaya naberezhnaya, 1, kafedra biokhimii Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova.

IVANOV, I.I.; KREPS, Ye.M.; ZAREMBSKIY, R.A., kand. med. nauk

First All-Union Biochemical Conference. Vest. AN SSSR 34  
no.5:144-148 My '64. (MIRA 17:6)

1. Chlen-korrespondent AMN SSSR (for Ivanov). 2. Chlen-  
korrespondent AN SSSR (for Kreps).



ZAREMBSKIY, R.A.; IVANOV, I.I.

First All-Union Biochemical Congress and the problems of  
modern biochemistry. Usp. sovr. biol. 58 no. 2:307-320  
S-0 '64. (MIRA 17:12)

IVANOV, I.I.; BOROVIKOVA, O.N.; VLADIMIROV, V.G.; DOLGO SABUROV, V.B.  
SHAROBAYKO, V.I.

Mechanism of DNA level reduction in issues after the exposure  
of the organism to ionizing radiation. Dokl. AN SSSR 155 no. 3:  
683-684 Mr '64. (MIRA 17:5)

1. Voenno-meditsinskaya akademiya im. S.M.Kirova. Predstavleno  
akademikom A.N.Belozerskim.

KOROVKIN, Boris Fedorovich; IVANOV, I.I., prof., red.; SHAROBAYKO,  
V.I., red.

[Enzymes in the diagnosis of myocardial infarct] Fermenty  
v diagnostike infarkta miokarda. Leningrad, Meditsina,  
1965. 127 p. (MIRA 18:4)

1. Chlen-korrespondent AMN SSSR (for Ivanov).

KREPS, Ye.M.; IVANOV, I.I.

First All-Union Biochemical Congress. Biokhimiia 29 no.4:  
791-798 J1-Ag '64. (MIRA 18:6)

BERG, Yu.N.; LEBEDEVA, N.A.; MARKINA, Ya.A.; IVANOV, I.I.

Effect of high pressure on some myosin properties. Biokhimiia 30  
no.2:277-281 Mr-Apr '65. (MIRA 18:7)

1. Kafedra biokhimiil' Peditricheskogo meditsinskogo instituta,  
Leningrad.

LYANOV, I.I.; PETERSEVICH, M.M.

Recording chemiluminescence spectra of unsaturated fatty acids and some biological lipids. Nauch.dokl.vys.shkoly; biol.nauki no.3:81-82 1965. (MIRA 1968)

1. Rekomendovana kafedroy biofiziki Moskovskogo gosudarstvennogo universiteta.

ETRASEVICH, Yu.M.; IVANOV, I.I.

Study of extremely weak chemiluminescence spectra in the processes of electrolytic oxidation of amino acids. *Biophysika* 10 no.4:698-699 '65. (MIRA 18.8)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta.

VDOVENKO, V.M.; IVANOV, I.I.; BOBROVA, V.N.; GAVRILENKO, I.S.; IVANOV, A.I.;  
SOLOV'YEV, A.L.; RUMYANTSEVA, L.N.

Possibility of applying 3-(3,4-dihydroxyphenyl)alanine (DOPHA)  
as a mediator introducing radioisotopes into melanoma. Dokl.  
AN SSSR 164 no.1:95-98 S '65. (MIRA 18:9)

1. Radiyevyy institut im. V.G. Khlopina i Voyenno-meditsinskaya  
akademiya im. S.M. Kirova. 2. Chlen-korrespondent AN SSSR. (for  
Vdovenko).



IVANOV, I.I.; LEMENIG, Yu.Yu.; IVANOV, A.I.

Functional significance of some protein subfractions entering into the composition of myofibril proteins of the skeletal muscles soluble in salt media of low ionic strength. Dokl. AN SSSR 160 no.3:717-719 Ja '65. (MIRA 18:3)

1. Voenno-meditsinskaya akademiya im. S.M. Kirova. Submitted May 26, 1964.

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619030007-5

APPROVED FOR RELEASE: 08/10/2001

AP5014230

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619030007-5"

with respect to release after exposure to high pressure, the protein complex, regarded as dissolved more or less readily in 0.6 M KCl. The behavior of actomyosin in animals at different stages of evolution suggests that there are different protein "families" involved. Orig. art. has: 1 figure, 3 tables.

ASSOCIATION: Kafedra biokhimi Leningradskogo pediatricheskogo meditsinskogo ins-  
tituta (Department of Biochemistry, Leningrad Pediatrics Medical Institute)

NO KEY SUV: 007

*a* L 9785-66  
ACC NR: AP5028541

SOURCE CODE: UR/0286/65/000/020/0151/0151

AUTHORS: <sup>111</sup>Kavalerov, A. A.; <sup>111</sup>Miroshnichenko, P. A.; <sup>111</sup>Norinskiy, Ye. Ya.; <sup>111</sup>Sidorov, K. I.; <sup>111</sup>Glazman, B. M.; <sup>111</sup>Krymchanskiy, F. G.; <sup>111</sup>Ivanov, I. I.

ORG: none

TITLE: Earth digging machine for ditch digging. Class 84, No. 175895 [announced by Special Construction Bureau No. 1 of the State Committee on Construction, Road Building and Municipal Machinery Construction at GOSSTROYe of the USSR (Osoboye konstruktorskoye byuro No. 1 gosudarstvennogo komiteta stroitel'nogo, dorozhnogo i kommunal'nogo mashinostroyeniya pri GOSSTROYe SSSR)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 20, 1965, 151

TOPIC TAGS: earth handling equipment, construction equipment, tractor, transportation equipment

ABSTRACT: This Author Certificate presents a ditch digging machine. The machine includes a tractor and a supporting frame on which are mounted a cutter, a discharge cone, a thrower with rotating mantle, a plow-type wideners, and a drive (see Fig.1). To decrease the metal and power requirements, the digger is con-

Card 1/2

UDC: 621.879.48.867.9

L 9785-66

ACC NR: AP5028541

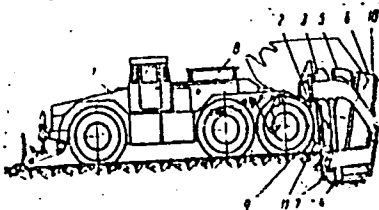


Fig. 1. 1 - Tractor; 2 - lifting frame;  
3 - face cutter; 4 - discharge cone;  
5 - thrower; 6 - rotating thrower mantle;  
7 - plow-shaped wideners; 8 - drive;  
9 - movable cutting blades; 10 - mantle support; 11 - levers of face cutter.

structured with a face cutter on the hub of which movable cutting blades are mounted. These are automatically rotated when the face cutter rotation is reversed. The cutter has a common drive with the thrower whose rotating mantle is mounted on a central support. A second feature has the rotation mechanism for the movable blades executed in the form of a pneumatic cylinder which is mounted in the sleeve of the lifting frame and which acts on levers rigidly connected to the blades of the face cutter. Orig. art. has: 1 figure.

SUB CODE: 13/

SUBM DATE: 09Jul64

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Card 2/2

17.000.1. .

Arrangement and maintenance of marine gas-and-oil engine  
Moskva, Izd-vo Ministerstva rechnogo flota  
SSSR, 1952. 10 p. (54-13405)

V6770.1:7

2

**IVANOV, K.**

Some *N*-condensation products of aromatic aldehydes with chloral hydrate or diphenylacetaldehyde and ammonia. Aleksandr Spasov and Ivan Khr. Ivanov. *Annuaire univ. Sofia, Faculté phys.-math.* 20, Livre 2, 85-120 (1941-42) (in Bulgarian). (1) The formation of I (benzylideneamino)-2,2,2-trichloroethanol (I), m. 138-8.5° (from benzene), from  $\text{C}_6\text{H}_5\text{CHO} \cdot \text{H}_2\text{O}$ ,  $\text{NH}_3$ , and  $\text{BzH}$ , can be represented by the equations  $\text{C}_6\text{H}_5\text{CHO} + \text{NH}_3 \rightarrow \text{C}_6\text{H}_5\text{CH}(\text{OH})\text{NH}_2$  (II) +  $\text{H}_2\text{O}$ , and II +  $\text{PhCHO} \rightarrow \text{PhCH}(\text{N})\text{CH}(\text{OH})\text{C}_6\text{H}_5$  (III) +  $2\text{H}_2\text{O}$  and III +  $2\text{NH}_3 \rightarrow (\text{PhCH}(\text{N}))_2\text{CHPh}$  (IV) +  $2\text{H}_2\text{O}$  and III +  $2\text{C}_6\text{H}_5\text{CHO} \rightarrow \text{I}$ . From 1.64 g. II and 1.06 g.  $\text{BzH}$  in 10 g.  $\text{C}_6\text{H}_6$ , even on very long standing; this is explained by III +  $\text{H}_2\text{O} \rightarrow \text{PhCHO} + 2\text{PhCH}(\text{N})\text{H}$  and  $\text{PhCH}(\text{N})\text{H} + \text{C}_6\text{H}_5\text{CHO} \rightarrow \text{I}$ . From 1.64 g. II and 1.06 g.  $\text{BzH}$  in 10 g.  $\text{C}_6\text{H}_6$ , I was obtained in 15-20 min. in 89% yield. III (3 g.) with 15 g. II in 15 g.  $\text{C}_6\text{H}_6$  gave I (64%) in 20 min., with further ams. pptg. during filtration, probably owing to atm. moisture. (2) Condensation of *p*- $\text{MeC}_6\text{H}_4\text{CHO}$  with  $\text{C}_6\text{H}_5\text{CHO} \cdot \text{H}_2\text{O}$  and  $\text{NH}_3$  (in equiv. ams.) gives *p*- $\text{MeC}_6\text{H}_4\text{CH}(\text{OH})\text{NCH}(\text{OH})\text{C}_6\text{H}_5$  (V), m. 144-6° (from  $\text{C}_6\text{H}_6$ ), yield 60%; the same product is obtained from *p*- $\text{MeC}_6\text{H}_4\text{CHO}$  and II. Similarly, condensation of  $\text{PhCH}(\text{N})\text{CH}(\text{OH})\text{C}_6\text{H}_5$  and  $\text{NH}_3$  gives  $\text{PhCH}(\text{N})\text{CH}(\text{OH})\text{C}_6\text{H}_5$  (VI), m. 137-7.5°, rhombic needles, yield 45%; *p*- $\text{MeC}_6\text{H}_4\text{CHO}$  gives *p*- $\text{MeOC}_6\text{H}_4\text{CH}(\text{OH})\text{NCH}(\text{OH})\text{C}_6\text{H}_5$  (VII), m. 141-2° (68%); *o*- $\text{HOOC}_6\text{H}_4\text{CHO}$  gives *o*- $\text{HOOC}_6\text{H}_4\text{CH}(\text{OH})\text{NCH}(\text{OH})\text{C}_6\text{H}_5$  (VIII), m. 123-4° (60%); *o*- $\text{MeC}_6\text{H}_4\text{CHO}$  gives *o*- $\text{MeC}_6\text{H}_4\text{CH}(\text{OH})\text{NCH}(\text{OH})\text{C}_6\text{H}_5$  (IX), m. 118°, 113°, and 123.5-4°, resp.; with the nitrobenzaldehydes, an excess of 3 moles  $\text{C}_6\text{H}_5\text{CHO} \cdot \text{H}_2\text{O}$  per mole  $\text{O}_2\text{NC}_6\text{H}_4\text{CHO}$  is indicated; the reactions are completed in 24 hrs., the yields being over 80%; equiv. ams. (0.05 mole) of *m*- $\text{O}_2\text{NC}_6\text{H}_4\text{CHO}$ ,  $\text{C}_6\text{H}_5\text{CHO} \cdot \text{H}_2\text{O}$ , and  $\text{NH}_3$  in EtOH (10 g.) give (*m*- $\text{NO}_2\text{C}_6\text{H}_4\text{CH}(\text{N})\text{CH}(\text{OH})\text{C}_6\text{H}_5$  (X), m. 160-4°; under the same conditions, *p*- $\text{O}_2\text{NC}_6\text{H}_4\text{CHO}$  (in  $\text{C}_6\text{H}_6$ ) gives white crystals turning pink on standing, sep'd. by hot  $\text{C}_6\text{H}_6$  into sparingly sol. crystals, (*p*- $\text{NO}_2\text{C}_6\text{H}_4\text{CH}(\text{N})\text{CH}(\text{OH})\text{C}_6\text{H}_5$  (XI), m. 154°, and the readily sol. *p*- $\text{O}_2\text{NC}_6\text{H}_4\text{CH}(\text{N})\text{CH}(\text{OH})\text{C}_6\text{H}_5$  (XII), m. 123.5-4°. Fural (0.018 mole) with equiv. ams. of  $\text{NH}_3$  and  $\text{C}_6\text{H}_5\text{CHO} \cdot \text{H}_2\text{O}$  in 10 g.  $\text{C}_6\text{H}_6$  gives  $\text{C}_6\text{H}_5\text{CH}(\text{OH})\text{NCH}(\text{OH})\text{C}_6\text{H}_5$  (XIII), m. 129° (65-60%). (3) Attempted acylation of the HO Schiff bases of type I with  $\text{AcCl}$ ,  $\text{Ac}_2\text{O}$ , and  $\text{H}_2\text{O}$ , gives products of the type  $\text{PhCH}(\text{NHAc})\text{C}_6\text{H}_5\text{O}_2\text{N}$ . The proposed reaction scheme is: I  $\rightarrow$  PhCH(NH) +  $\text{C}_6\text{H}_5\text{CHO}$ ; 3PhCH(NH)  $\rightarrow$  III +  $\text{NH}_3$ ; III +  $\text{H}_2\text{O}$   $\rightarrow$  PhCH(NH) +  $\text{AcCl}$ ; PhCH(NH) +  $\text{PhCHO}$   $\rightarrow$  PhCH(NH) +  $\text{PhCHO}$ ; (N:CHPh) +  $\text{PhCHO}$   $\rightarrow$  PhCH(NH) +  $\text{PhCHO}$ ; (N:CHPh) +  $\text{HCl}$ ; III +  $2\text{H}_2\text{O}$   $\rightarrow$  PhCH(NH) +  $2\text{HCl}$ . Examples of reactions: IV +  $2\text{AcCl}$   $\rightarrow$  V +  $2\text{HCl}$ . Examples of reactions: I (5 g.) is shaken with 4 g. anhyd.  $\text{Na}_2\text{CO}_3$  and 30 g. dry ether for 4-5 hrs.; during the 1st 20 min., 2.4 g.  $\text{AcCl}$  in 5 g. ether is added by portions; the ppt. is washed with water and recrystd. from 70% MeOH, giving 1.8-2.0 g. IV, m. 134-4.5°, insol. in  $\text{H}_2\text{O}$ , little sol. in cold ether and  $\text{C}_6\text{H}_6$ , easily sol. in hot alc.; the ether soln. ppts. a product m. 230-7°, giving no m.p. depression with authentic V. Similarly, I with  $\text{BzCl}$  gives PhCH(NH) + 2 g. (N:CHPh), m. 140-0.5° (MeOH). I (2 g.) with 2 g.  $\text{Bz}_2\text{O}$ , 0.5 g.  $\text{H}_2\text{O}$ , and 10 g. ether ppts. on 10-12 hrs. standing, 0.32 g. (40%) PhCH(NH) +  $\text{Bz}_2\text{O}$ , m. 224° (EtOH). IV (1.5 g.) suspended in 3 g. EtOH, with 3 g.  $\text{Ac}_2\text{O}$ , 0.3 g.  $\text{H}_2\text{O}$ , is converted into V. I (2.5 g.) with 3 g.  $\text{Ac}_2\text{O}$ , 0.3 g.  $\text{H}_2\text{O}$ , and 12 g. ether, on standing from 178° to 236° (27%).  $\text{C}_6\text{H}_5\text{O}_2\text{N}$  (VI), m.p. rising from 178° to 236° (27%). All 3 products, IV, V, and VI, are obtained in the reaction between III and  $\text{Ac}_2\text{O}$ : III (3 g.) in 15 g. ether, treated with 1 g.  $\text{Ac}_2\text{O}$  and 0.2 g.  $\text{H}_2\text{O}$  and left standing 10-12 hrs., ppts. IV in 36% yield; the same amt. of III and ether, with 2.5 g.  $\text{Ac}_2\text{O}$  and 0.4 g.  $\text{H}_2\text{O}$ , give 1.2-1.4 g. VI and some

IV. (4) The bases of type I are suitable for purposes of identification of aromatic aldehydes and their sepn. from aliphatic aldehydes, which form no cryst. products with  $\text{CCl}_4\text{CHO}$  and  $\text{NH}_3$ ; thus,  $\text{PhCHO}$  can be detected in the presence of a 7:1 excess of  $\text{EtCHO}$  and a 4:1 excess of  $\text{PrCHO}$ . (5) Detsn. of mol. wt.,  $M$ , of the type I bases give correct values only in low-melting solvents (e.g.,  $\text{PhNMe}_2$ ,  $\text{PhNO}_2$ ); the values are distinctly too low in higher-melting solvents ( $\text{Ph}_2\text{NH}$ ,  $\text{C}_6\text{H}_6$ , phenanthrene); this may be ascribed to a disocn.,  $\text{I} \rightarrow \text{PhCH:NH} + \text{CCl}_4\text{CHO}$ , borne out by the concn. dependence of  $M$ ; thus, I in  $\text{C}_6\text{H}_6$ , 0.7, 2.5, and 4.5%, gives an  $M$  of 245, 237, and 276, resp. (true  $M$ , 279). (6) Condensations of  $\text{Ph}_2\text{CHCHO}$  (VII) with aromatic aldehydes and  $\text{NH}_3$  lead to several well-defined

products. Without solvent, VII 4 g.,  $\text{PhCHO}$  3.1 g., and 25%  $\text{NH}_4\text{OH}$  1.6 g. (0.02:0.03:0.03 mol.) gave  $\text{Ph}_2\text{C:ClNHCH:CPH}_2$  (VIII), m. 144-5°. In  $\text{C}_6\text{H}_6$  (15 g.), 5.8 g. VII, 3.1 g.  $\text{PhCHO}$ , and 5 g. 25%  $\text{NH}_4\text{OH}$  gave, besides some VIII, mainly  $\text{PhCH:NCH:CPH}_2$  (IX), yellow needles, m. 131-2° (36%), insol. in  $\text{H}_2\text{O}$ , little sol. in ether and alc. IX (2 g.) in 6 g. ether with 6 g.  $\text{Ac}_2\text{O}$  and 1 g.  $\text{H}_2\text{O}$  gives, after 24 hrs.,  $\text{Ph}_2\text{C:CHNH}_2$ , m. 163-4° (35-40%). VII (5 g.) with 10 cc. 25%  $\text{NH}_4\text{OH}$  gives VIII (40-50%). VII (2 g.) in 10 g.  $\text{C}_6\text{H}_6$  with 3.2 g.  $\text{CCl}_4\text{CHO}$ ,  $\text{H}_2\text{O}$  and 1 g. concd.  $\text{NH}_4\text{OH}$  pptd., after 15-20 min., a product, m. 109-11° (EtOAc), which is hydrolyzed by  $\text{HCl}$  into  $\text{CCl}_4\text{CHO}$ ,  $\text{NH}_3$ , and VIII, and is thus assumed to be  $\text{CCl}_4\text{CH:NCH(OH)CHPh}_2$ .

N. Thon



IYANOV, I.K.

All-Union Interdepartmental Conference on the Study of the  
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(Geology, Stratigraphic)

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Circulatory System.

S

Abs Jour : Ref Zhur Biol., No 11, 1958, 50243

Author : Ivanov, I.K.

Inst : Novosibirsk Medical Institute

Title : Measurement of Orthodiagraphic Dimensions of the Heart  
and Vascular Fasciculus by Means of a Plumb Line

Orig Pub : Tr. Novosibirskogo med. in-ta, 1957, 27, 312-315

Abstract : A method which allows one to carry out orthographic  
measurements of the heart and the vascular fasciculus  
by means of an ordinary x-ray apparatus without a spe-  
cial orthodiagraph is described. -- M.A. Khurjes

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SO: LETOPIS ZHURNAL STATEY- Vol. 28, Moskva, 1949

IVANOV, I. K.

21585 IVANOV, I. K. Materialy k poznaniyu Flory i Fauny risovykh poley Syr-dar'inskogo rayona Kzyl-Ordinskoy oblasti. (K probleme is Pol' zovaniya v Rybokhoz. otnoshenii) Izvestiya Akad. Nauk kazakh. SSR, No. 63, Seriya Zool., Vyp. 8, 1948, s. 176-85 — Rezyume Na Kazakh. Yaz — Bibliogr: 6 Nazv.

SO: Letopis' Zhurnal'nykh Statey, No. 29, Moskva, 1949

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Ivanov, I. K. "Thiodiphenylamine as a larvicide against the grubs of Anopheles," Zdravookhraneniye Kazakhstana, 1949, No. 1, p. 23-24.

SO: U-3736, 21 May 53, (Letopis 'Zhurnal 'nykh: Statey, No. 17, 1949).

*IVANOV, I. KH.*

USSR/Parasitology - Acarina and Insect-Vectors of Disease Pathogens. 6-

Abs Jour : Ref Zhur - Biol., No 5, 1958, 19664

Author : Ivanov, I. Kh.

Instit : -

Title : Migration of Suslik Fleas from Burrows Through Earth Plugs.

Orig Pub : Tr. Rostovsk. n./D. gos. n.-i. protivochum. in-ta, 1956, 10, 470-474

Abstract : Migration toward burrow exits of suslik fleas (species not mentioned) through earth plugs slightly mounded of 5 to 20 cm in height was tracked. Observations were conducted from the end of May to the beginning of July 1951 at 6 burrows, into each of which 100 fleas were put in a section of vertical passages artificially isolated from deep portions of the burrow and separated from the entrance openings by earth plugs. The migrating insects were caught at burrow exits by Tiflon and Potapov devices for a period

Card 1/2

Card 2/2



MIRONOV, N.P.; TINKER, I.S.; SHISHKIN, A.K.; SHIRANOVICH, P.I.;  
VAL'KOV, B.G.; IVANOV, I.Kh.; KARPUZIDI, K.S.; KLIMCHENKO,  
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IVANOV, I. K.

For a 600 Ton Coal Output (during 24 hours) on a Wide Front. Minno Delo  
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IVANOV, I.K., inzhener.

For a daily production of 600 tons of coal per stop. Ugol' 29  
no.9:39-40 S '54. (MLRA 7:11)  
(Coal mines and mining)

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tekhn.red.; SHKLYAR, S.Ya., tekhn.red.

[Album of equipment for the mechanization of auxiliary labor-  
consuming operations in coal mines] Al'bom oborudovaniia dlia  
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(Coal mines and mining--Equipment and supplies)

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From the experience of the "Bogdan" State Industrial Enterprise, city of Klisura, as to the use of beech cuttings for the manufacture of retort carbon. Durvomebel prom 7 no.2/3:53-55 Mr-Je '64.

1. Chief Engineer, "Bogdan" State Industrial Enterprise, Klisura.



SAMSONOV, Georgiy Nikiforovich; EL'KIN, Iosif Lazarevich; MERKULOV,  
Nikolay Yakovlevich; BOGUTSKIY, Nikolay Vasil'yevich; KAZAKOV,  
Stanislav Semenovich; IVANOV, Ivan Konstantinovich; ABRAMOV,  
V.I., inzh., otv. red.

[The K-52M (1K-52M) narrow-cut cutter-loader] Uzkozakhvatnyi  
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(MIRA 18:4)

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35,000 Chickens in excess of plan. Zets. zhiv. 14, no. 4, 1958.

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2

*Ivanov, I. M.*

Name: IVANOV, I. M.

Dissertation: Ways of improving the quality of check row planting and the economic effectiveness of the SKG-6 planter

Degree: Cand Agr Sci

*Defended at  
Publication*

Institution: Moscow Order of Lenin Agricultural Acad imeni K. A. Timiryazev

Defense Date, Place: 1956, Moscow

Source: Knizhnaya Letopis', No 47, 1956

USSR/Cultivated Plants - Potatoes, Vegetables, Melons.

M-3

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000619030007-5"

Abs Jour : Ref Zhur - Biol., No 3, 1958, 10824

Author : Ivanov, I.M.

Inst : -

Title : Growing Early Cabbage Seeds.

Orig Pub : Inform. bul. Gos. komis. po sortoispyt. s.-kh. kul'tur pro M-ve s. kh. SSSR, 1957, No 2, 10-11

Abstract : The Upper Mullinsk variety plot, Molotovskaya oblast', has investigated a new method of growing early cabbage seed. The cabbage stumps left after the first harvest of cabbage heads are used as seed plants. They are harvested in October together with the roots and stored in potato storage bins. In spring the styles are set out. In 1956, three kilograms of seed were acquired from every 100 styles of the Zolotoy gektar 1432 variety; this new technique is recommended for mass introduction into production.

Card 1/1

IVANOV I. M.

TA 170T5

USSR/Biology - Trees, Planting  
Soil Conservation

May/June 50

"Planting Timber Belts by the Cluster Method,"  
I. M. Ivanov

"Agrobiol" No 3, pp 130-137

Results in planting timber shelter belts in  
1949 on edges of fields of Kyubyshev Oblast.  
Checks effect of period when planting occurs  
and presence of cover crop on sprouting and  
growth of seedlings. Four tables.

170T5

IVANOV, Iv. M.

Observations on tuberculin allergy among students in Krumovgrad.  
Suvrem. med., Sofia 9 no.2:69-76 Feb 58.  
(TUBERCULIN REACTION, statist.  
in Bulgarian students (Bul))



SHUKAN, Ye.P.; IVANOV, I.M.

Industrial flotation of barite with an oxidized petroleum fraction.  
TSvet. met. 34 no.3:10-14 Mr '61. (MIRA 14:3)  
(Flotation—Equipment and supplies) (Barite)

ACCESSION NR: AP4041156

8/0020/64/156/004/0888/0890

AUTHOR: Nikolayev, A. V.; Ivanov, I. M./ Yakovlev, I. I.

TITLE: Phase equilibria in the UO sub 2 SO sub 4 - H sub 2 O - BEDPA and H sub 2 SO sub 4 - H sub 2 O - BEDPA systems

SOURCE: AN SSSR: Doklady\*, v. 156, no. 4, 1964, 888-890

TOPIC TAGS: uranyl sulfate, extraction, dibutylphosphinic acid butyl etherate, phase diagram, solubility, uranyl sulfate containing system

ABSTRACT: Phase diagrams were constructed for the uranyl sulfate - water - butyl ester of dibutylphosphinic acid (BEDPA -  $C_4H_9OPO(C_4H_9)_2$ ) and sulfuric acid - water - BEDPA systems which constitute the quaternary extraction system for uranium VI salts (figs. 1 and 2). The extraction can be effected only in the narrow area A. The disolvate  $UO_2SO_4 \cdot 2BEDPA$  is very stable in water; only in excess water will it break up into 2 liquid phases - an aqueous phase containing 1.80% uranyl sulfate and an organic phase with 10.2%  $UO_2SO_4$ , 16.6%  $H_2O$  and 73.2% BEDPA. BEDPA is completely miscible with  $H_2SO_4$ , starting with approximately 88% acid. The binodal of the ternary system (fig. 2) is characteristic of organic systems having no chemical

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ACCESSION NR: AP4041156

reaction. Orig. art. has: 3 tables and 2 figures.

ASSOCIATION: Institut neorganicheskoy khimii, Sibirskogo otdeleniya Akademii nauk  
SSSR (Institute of Inorganic Chemistry, Siberian Department Academy of Sciences)

SUBMITTED: 02/19/64

ENGL: 02

SUB CODE: GC

NO REF SOV: 007

OTHER: 006

Card 2/4

ACCESSION NR: AP4041156

ENCLOSURE: 01

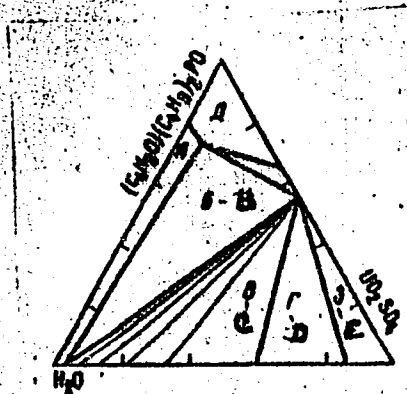


Fig. 1. Solubility diagram of the  $UO_2SO_4 - H_2O - C_4H_9OPO(C_2H_5)_2$  system at 25°C.  
 A - area of separation of the aqueous and organic solutions of uranyl sulfate;  
 B - nonvariant area: solid disolvate, organic phase aqueous solution  
 C - area of equilibrium of disolvate with aqueous phase;  
 D - area of equilibrium of solid disolvate, trihydrate and saturated aqueous solution; E - area of coexistence of solid disolvate & saturated organic phase

Card 3/4

ACCESSION NR: AP4041156

ENCLOSURE: 02

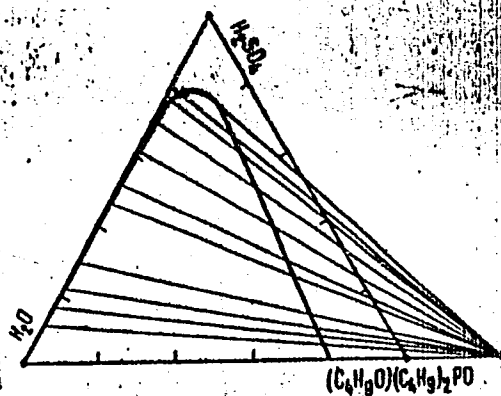


Fig. 2. Solubility diagram of the H<sub>2</sub>SO<sub>4</sub> - H<sub>2</sub>O - C<sub>14</sub>H<sub>9</sub>OPO(C<sub>14</sub>H<sub>9</sub>)<sub>2</sub> system at 250.

Card 4/4

IVANOV, Ivan Markelovich. Ledianaia zona: Fiziko-geograficheskoe opisanie poliarnogo sektora SSSR. Arkhangel'sk, Sevkraigiz, 1933. 116 p.

SO: LC, Soviet Geography, Part I, 1951, Uncl.