KONIKOV, L.A., red.; GERASIMOVA, Ye.S., tekhn.red.

[Methodology for determining norms for specific capital investments]Metodika opredeleniia normativov udel'nykh kapital'nykh vlozhenii. Moskva, Ekonomizdat, 1962. 72 p. (MIRA 15:10)

1. Russia (1923- U.S.S.R.)Gosudarstvennyy nauchno-ekonomicheskiy sovet.

(Capital investments)

GREBTSOV, G.I., kand. ekon. nauk, dots.; SMEKHOV, B.M., kand. ekon. nauk, dots.; SMOLYAR, L.I., starshiy prepodavatel'; GRANBERG, A.G.; AGANBEGYAN, A., kand. ekon. nauk, red.; KONIKOV, L.A., red.; GERASIMOVA, Ye.S., tekhn. red.

[Principles of working out an interbranch balance]Osnovy razrabotki mezhotraslevogo balansa; uchebnoe posobie. [By]G.I.Grebtsov i dr. Moskva, Ekonomizdat, 1962. 278 p. (MIRA 16:3)

1. Vychislitel'nyy tsentr Gosudarstvennogo nauchno-ekonomicheskogo soveta Soveta Ministrov SSSR (for Granberg).
(Russia—Economic policy)
(Programming (Electronic computers))

FREYMUNDT, Ye.N., dots.; KORENEVSKAYA, N.N., dots.; IL'CHENKO, S.P.; SAMOYLOVA, A.A., dots.; GUROV, G.M., dots.; IVANOV, Yu.M.; ZAYTSEVA, N.V., dots.; EYDEL'MAN, M.R., red.; KONIKOV, L.A., red.; PONOMAREVA, A.A., tekhn. red.

[Balance of the gross national product of a Union Republic; problems in the theory and methodology of its preparation] Balans obshchestvennogo produkta soiuznoi respubliki; voprosy teorii i metodiki sostavleniia. Moskva, Ekonomizdat, 1962. 326 p. (MIRA 16:4)

1. Moscow. Ekonomiko-statisticheskiy institut.
(Gross national product)

POMERANTSEV, Vladimir Vladimirovich, kand. tekhn.nauk; KONIKOV, L.A., red.; GERASIMOVA, Ye.S., tekhn. red.

[Practical method of correlation analysis; using the examples of analyses of capital expenditures] Prakticheskaia metodika korreliatsionnogo analiza; na primerakh issledovanii kapital'nykh zatrat. Moskva, Ekonomizdat, 1963. 24 p. (MIRA 16:6)
(Correlation (Statistics)) (Capital investments)

KONIKOV, L.A., red.; GERASIMOVA, Ye.S., tekhn. red.

[Problems in improving the planning and the supply of materials and equipment] Voprosy sovershenstvovaniia planirovaniia i material'no-tekhnicheskogo snabzheniia. Moskva, Ekonomizdat, 1963. 196 p. (MIRA 16:7)
(Russia--Economic policy)
(Industrial procurement)

BELKIN, Viktor Danilovich; KONIKOV, L.A., red.; MISHNAYEVSKAYA, G.V., mladshiy red.; GERASIMOVA, Ye.S., tekhn. red.

[Uniform prices and economic measurements based on them] TSeny edinogo urovnia i ekonomicheskie izmereniia na ikh osnove. Moskva, Izd-vo ekon. lit-ry, 1963. 345 p. (MIRA 16:12)

1. Zaveduyushchiy laboratoriyey ekonomicheskikh issledovaniy Instituta elektronnykh upravlyayushchikh mashin (for Belkin). (Prices)

BIRMAN, I.Ya., red.; MINTS, L.Ye., red.; KONIKOV, L.A., red.; MISHNAYEVSKAYA, G.V., mlad. red.; PONOMAREVA, A.A., tekhn. red.

[Mathematical methods and the problems of production distribution] Matematicheskie metody i problemy razmeshcheniia proizvodstva. Moskva, Ekonomizdat, 1963. 347 p. (MIRA 16:12)

(Industries, Location of)
(Economics, Mathematical)

MITROFANOV, A.I., kand. ekon. nauk; TIKIDZHIYEV, R.N., kand. ekon. nauk; BEREGOVA, L.I.; SLABCHENKO, S.K.; SHAPIRO, Ye.A.; KORZUN, P.P., kand. ekon. nauk; KHAVKIN, S.N., kand. ekon. nauk; REZCHIKOV, A.I.; KONIKOV, L.A., red.; GERASIMOVA, Ye.S., tekhn. red.

[Determining specific capital investments in industry] Opredelenie udel'nykh kapital'nykh vlozhenii v promyshlennosti. Moskva, Ekonomizdat, 1963. 215 p. (MIRA 17:1)

1. TSentral'nyy nauchno-issledovatel'skiy ekonomicheskiy institut.

(Capital investments)

SHCHELOKOV, N.A.; MAKEYENKO, M.M., doktor ekon. nauk; KONTAN, L.A., red.

[Economy of the Moldavian S.S.R. and prospects for developing it] Ekonomika Moldavskoi SSR i perspektivy ee razvitiia. Moskva, Ekonomika, 1964. 211 p. (MIRA 18:1)

KHAYKIN, Vladlen Pavlovich; NAYDENOV, Viktor Sergeyevich; GALUZA, Stanislav Grigor'yevich; LIBERMAN, Ye.G., doktor ekon. nauk, prof., red.; KONIKOV, L.A., red.; MISHNAYEVSKAYA, G.V., mlad. red.

[Correlation and statistical models in economic calculations] Korreliatsiia i statisticheskoe modelirovanie v ekonomicheskikh raschetakh. Moskva, Ekonomika, 1964. 215 p. (MIRA 17:9)

ACC NR: AP6021477 SOURCE CODE: UR/0413/66/000/011/0103/0104

INVENTOR: Autsgraf, F. Zh.; Vertushkin, B. A.; Golovin, V. V.; Kon'kov, Yu. A.; Fedoseyev, R. Yu.

ORG: None

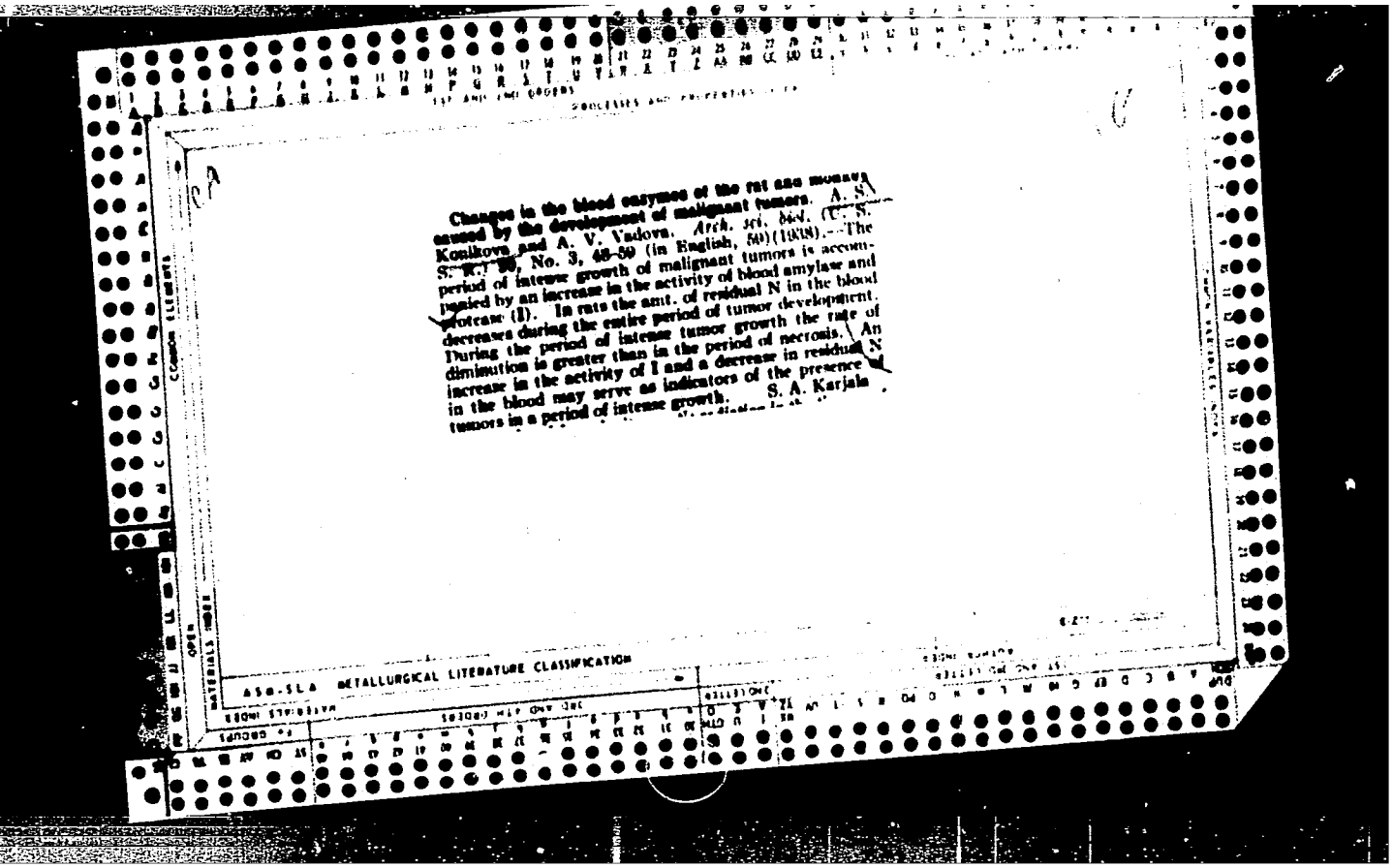
TITLE: A pneumatic relay. Class 42, No. 182416

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 11, 1966, 103-104

TOPIC TAGS: pneumatic device, nonelectric signal equipment

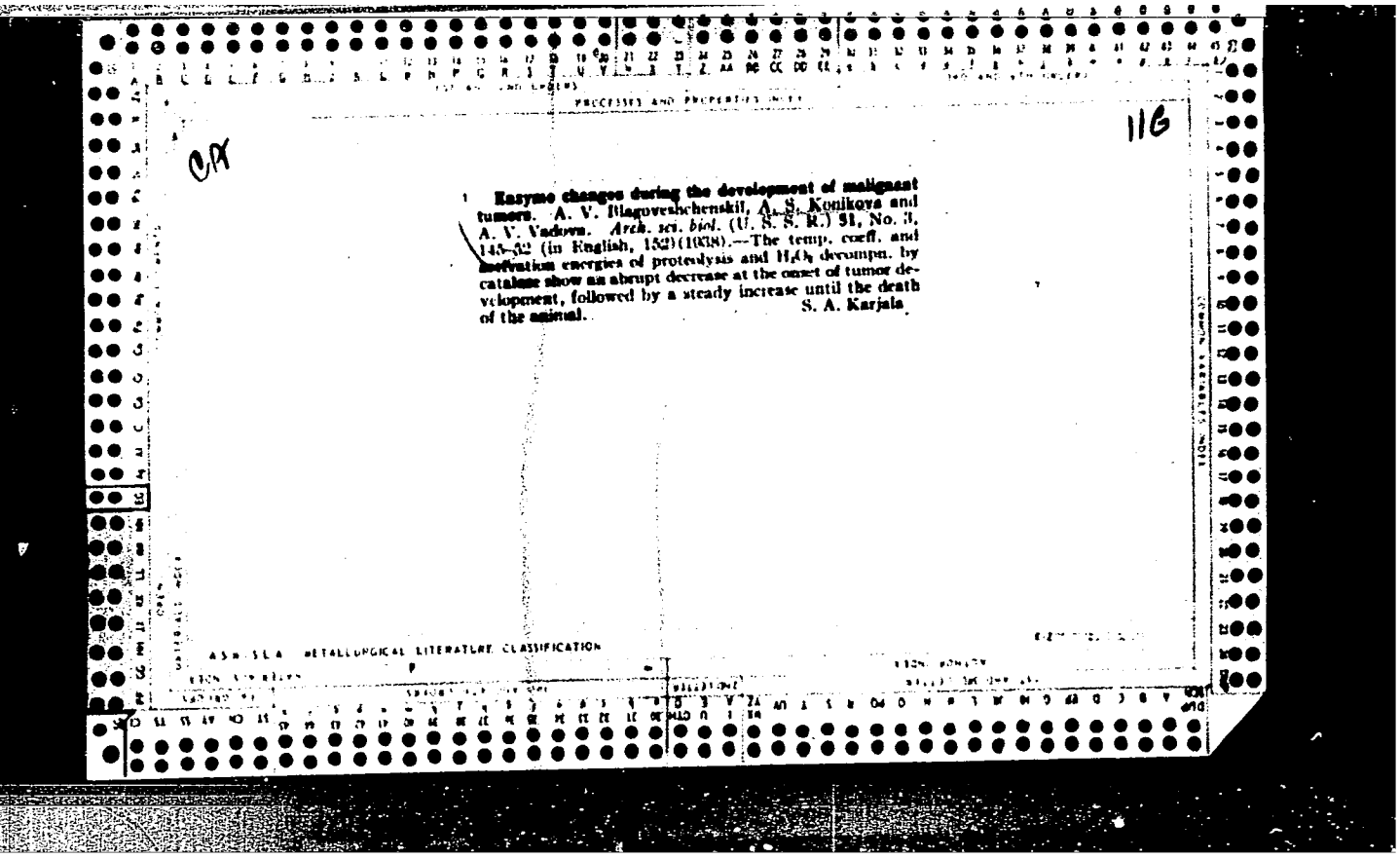
ABSTRACT: This Author's Certificate introduces a pneumatic relay which contains a housing made in the form of disc plates with channels, a diaphragm unit which forms a number of chambers, and nozzles mounted in the flow chambers. Short circuiting conditions are prevented by making the face plates on the rigid center of the diaphragm unit from an elastic material, e. g. rubber, and putting a greater distance between the planes of these face plates than between the edges of the nozzles.

Card 1/2 UDC: 681.142-525



Changes in the blood enzymes of the rat and mouse caused by the development of malignant tumors. A. S. Konikova and A. V. Vadova. *Arch. Sci. biol. (U. S. S. R.)* 59, No. 3, 48-59 (in English, 59)(1938).—The period of intense growth of malignant tumors is accompanied by an increase in the activity of blood amylase and protease (I). In rats the amt. of residual N in the blood decreases during the entire period of tumor development. During the period of intense tumor growth the rate of diminution is greater than in the period of necrosis. An increase in the activity of I and a decrease in residual N in the blood may serve as indicators of the presence of tumors in a period of intense growth. S. A. Karjala

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

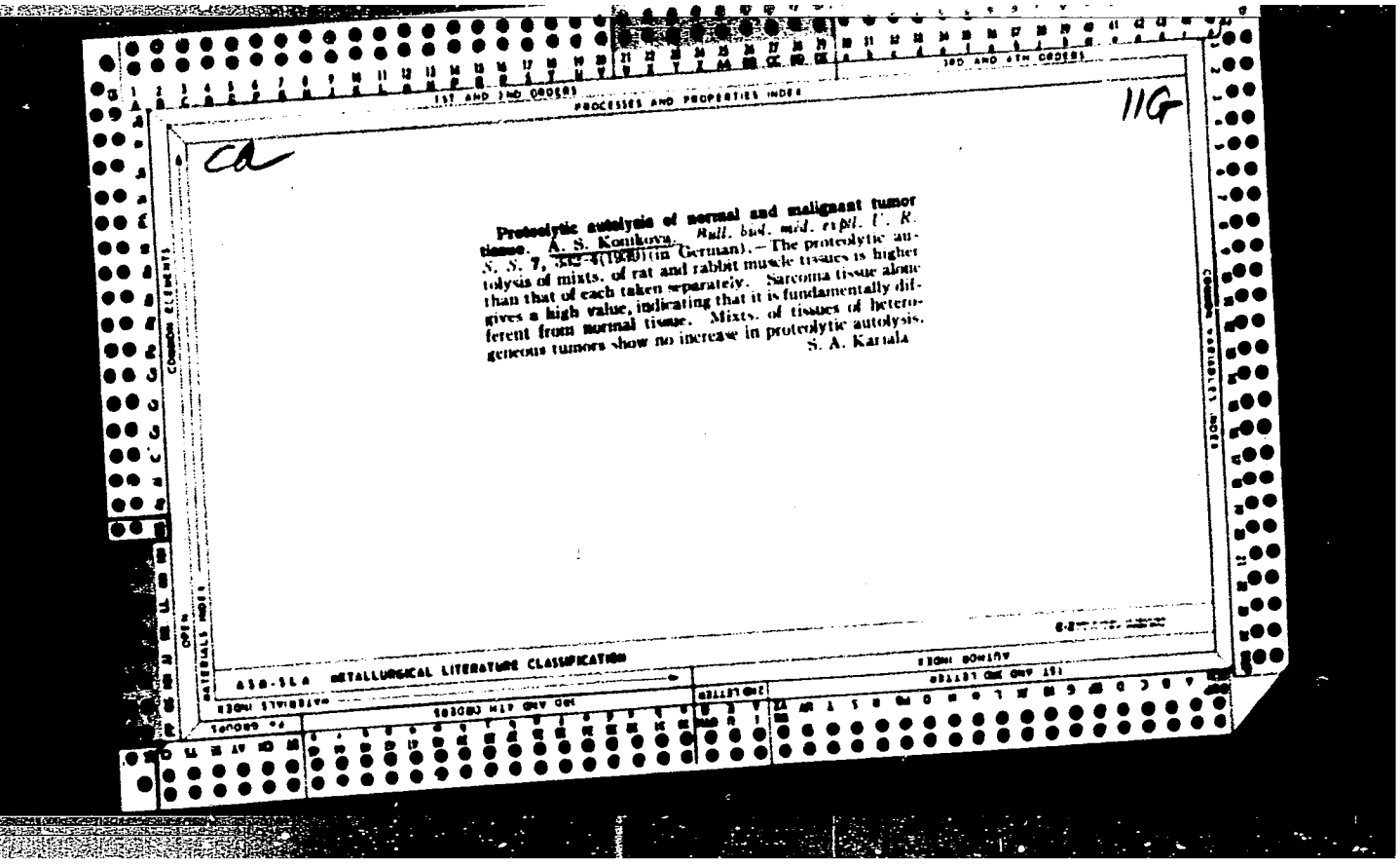


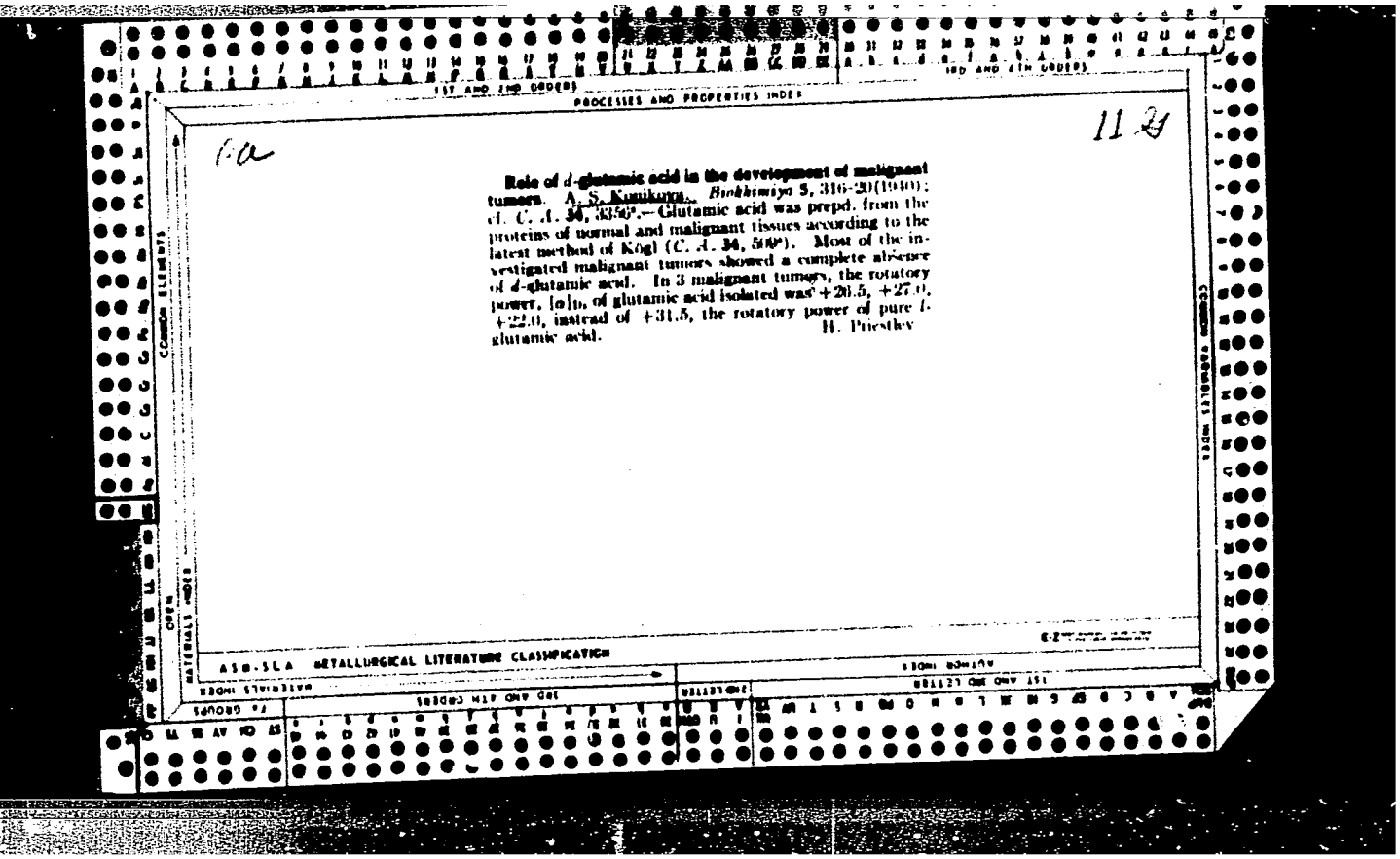
CA

116

Enzyme changes during the development of malignant tumors. A. V. Blagoveshchenskii, A. S. Konikova and A. V. Vadova. *Arch. sci. biol.* (U. S. S. R.) 51, No. 3, 143–52 (in English, 152)(1938).—The temp. coeff. and inactivation energies of proteolysis and H_2O_2 decompn. by catalase show an abrupt decrease at the onset of tumor development, followed by a steady increase until the death of the animal. S. A. Karjala

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



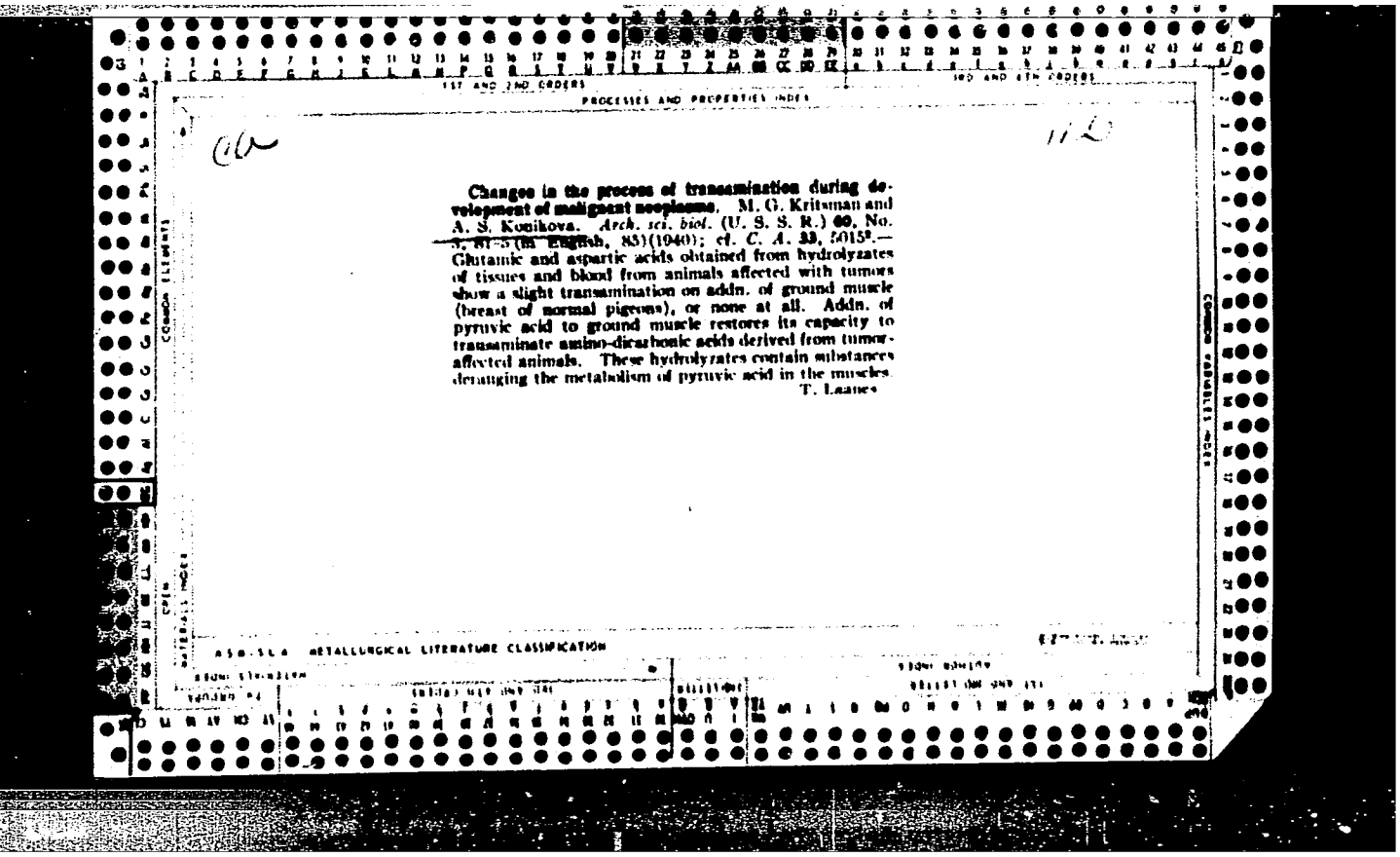


PROCESSES AND PROPERTIES INDEX

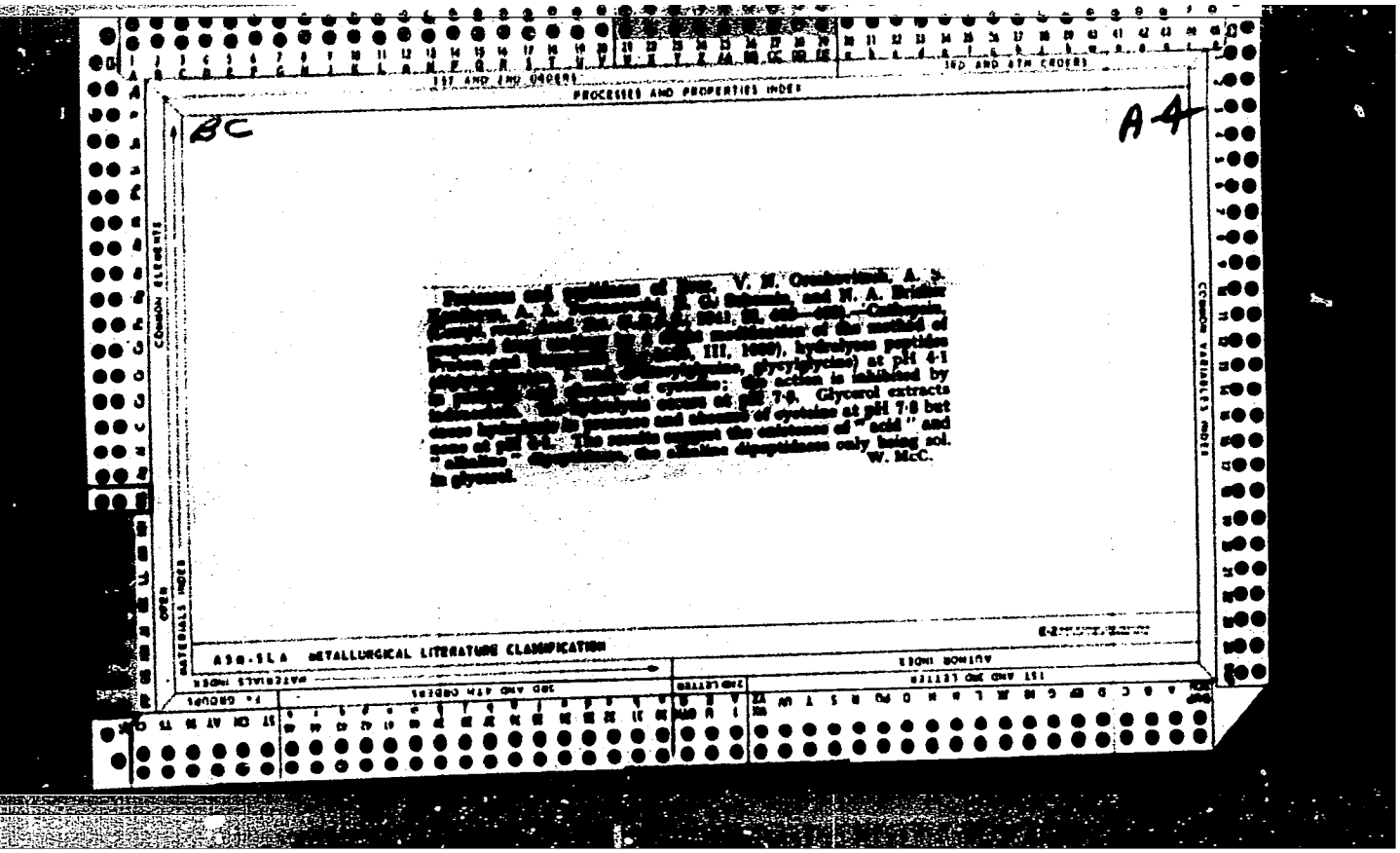
11 H

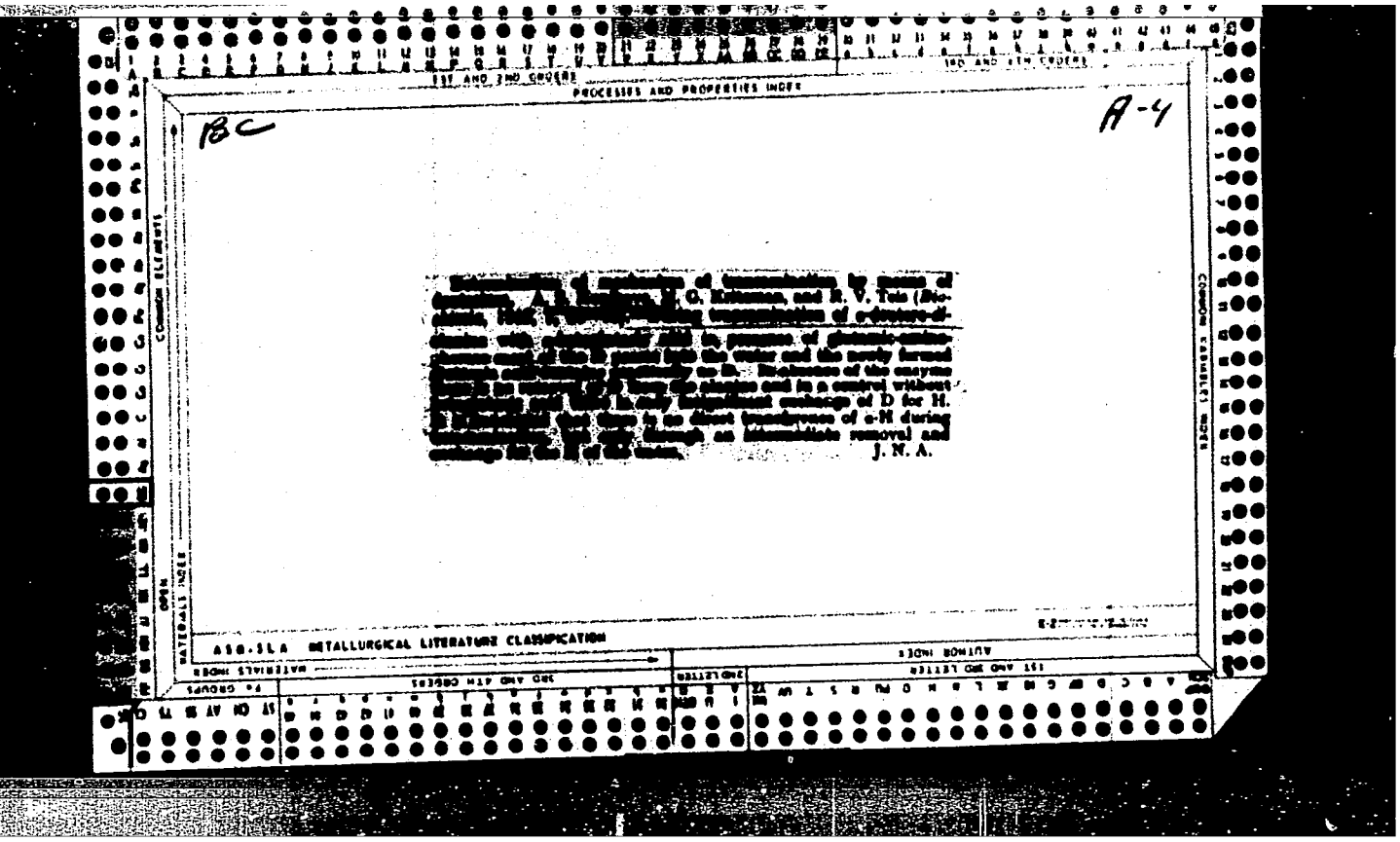
Role of *d*-glutamic acid in the development of malignant tumors. A. S. Kunikuna. *Biokhimiya* 5, 316-20(1940); cf. C. A. 34, 3350.—Glutamic acid was prepd. from the proteins of normal and malignant tissues according to the latest method of Kögl (C. A. 34, 500). Most of the investigated malignant tumors showed a complete absence of *d*-glutamic acid. In 3 malignant tumors, the rotatory power, $[\alpha]_D$, of glutamic acid isolated was +20.5, +27.0, +22.0, instead of +31.5, the rotatory power of pure *l*-glutamic acid.
H. Priestley

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Changes in the process of transamination during development of malignant neoplasms. M. G. Kritsman and A. S. Konikova. *Arch. sci. biol.* (U. S. S. R.) **60**, No. 3, 81–5 (In English, 85)(1940); cf. *C. A.* **33**, 5015⁹.—Glutamic and aspartic acids obtained from hydrolyzates of tissues and blood from animals affected with tumors show a slight transamination on addn. of ground muscle (breast of normal pigeons), or none at all. Addn. of pyruvic acid to ground muscle restores its capacity to transaminate amino-dicarbonic acids derived from tumor-affected animals. These hydrolyzates contain substances deranging the metabolism of pyruvic acid in the muscles.
T. Leanes

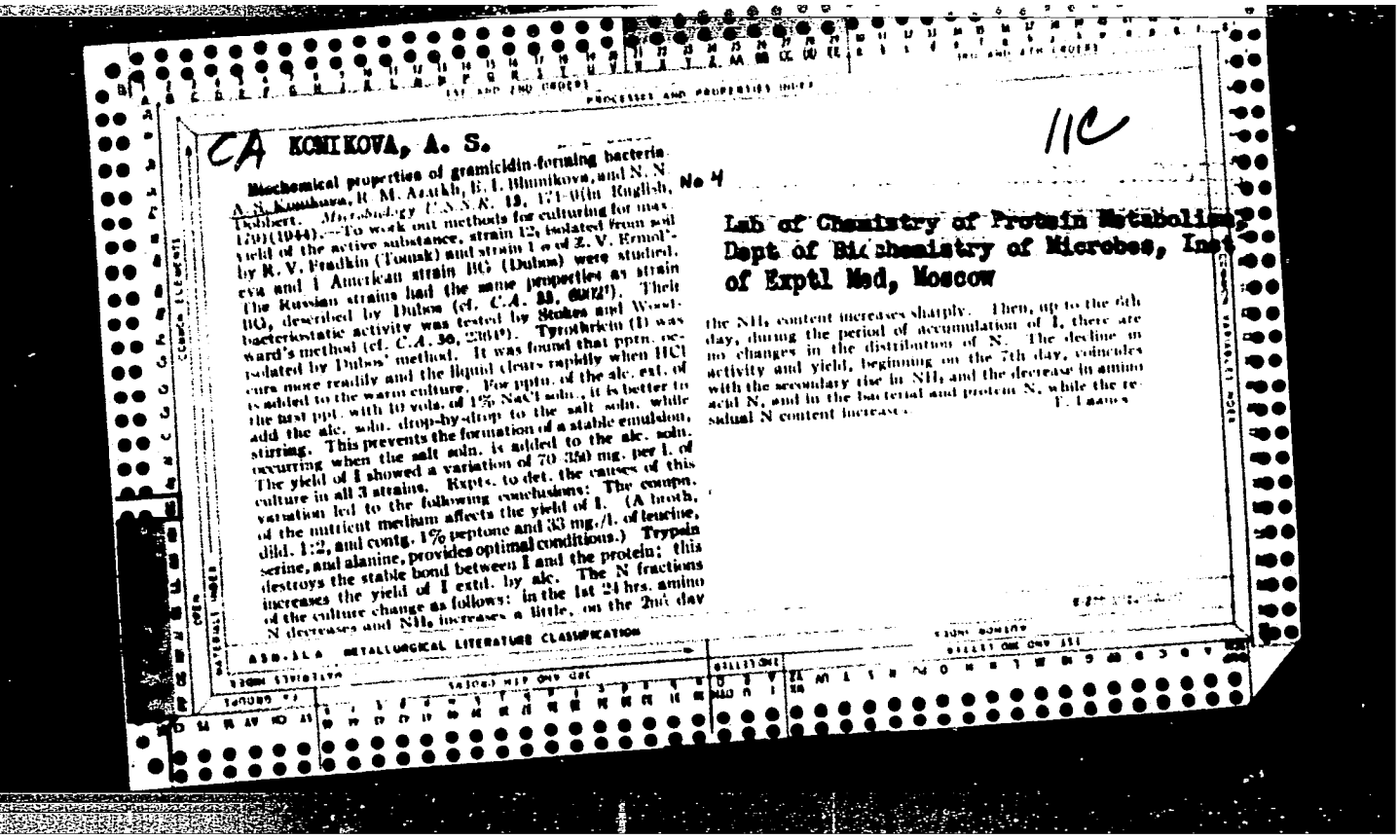




KONIKOVA, A.S.

"The Use of Heavy Isotopes of Hydorgen and Nitrogen in Biochemistry" (p.27) by A.S. Konikova (Moscow) and M.G. Kritsman

SO: Advances in Modern Biology (Uspekhi Sovremennoi Biologii) Vol. XV, 1942, No. 1



CA KOMIKOVA, A. S.

11C

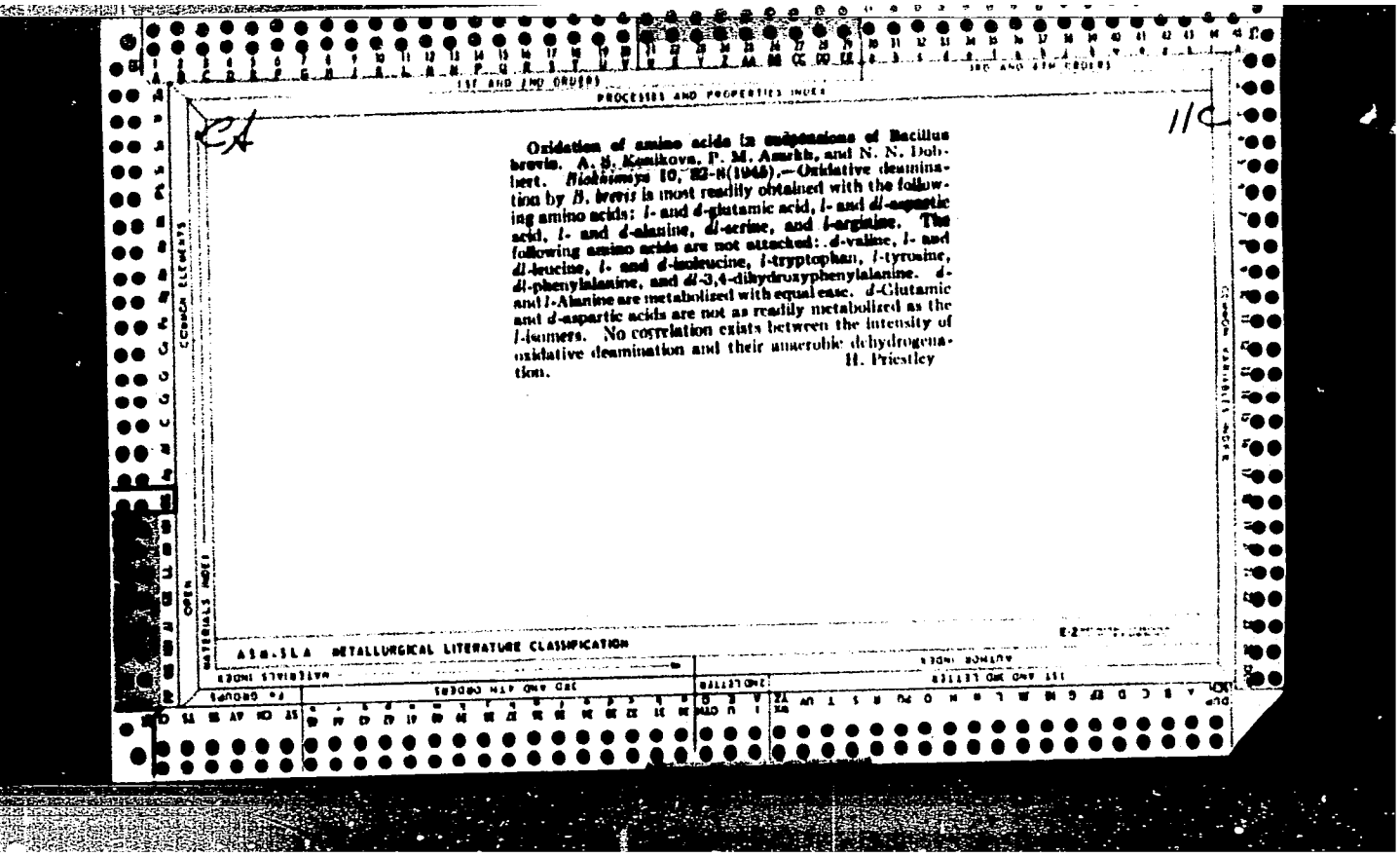
Biochemical properties of gramicidin-forming bacteria. A. S. Komikova, R. M. Azarkh, E. I. Blumikova, and N. N. Dubbert. *Microbiology (U.S.S.R.)* 13, 171-6(in English, 170)(1944).—To work out methods for culturing for max. yield of the active substance, strain 125 isolated from soil by R. V. Feadkin (Tsunak) and strain I and Z. V. Ermol'eva and I American strain BG (Dubos) were studied. The Russian strains had the same properties as strain BG, described by Dubos (cf. *C.A.* **38**, 6072⁷). Their bacteriostatic activity was tested by Stokes and Woodward's method (cf. *C.A.* **36**, 2804⁶). Tyrothricin (I) was isolated by Dubos' method. It was found that ppts. occure more readily and the liquid clears rapidly when HCl is added to the warm culture. For ppts. of the alc. ext. of the best ppt. with 10 vols. of 1% NaCl soln., it is better to add the alc. soln. drop-by-drop to the salt soln. while stirring. This prevents the formation of a stable emulsion, occurring when the salt soln. is added to the alc. soln. The yield of I showed a variation of 70-350 mg. per l. of culture in all 3 strains. Expts. to det. the causes of this variation led to the following conclusions: The compn. of the nutrient medium affects the yield of I. (A broth, dild. 1:2, and contg. 1% peptone and 33 mg./l. of leucine, serine, and alanine, provides optimal conditions.) Trypsin destroys the stable bond between I and the protein; this increases the yield of I extd. by alc. The N fractions of the culture change as follows: in the 1st 24 hrs. amino N decreases and NH_3 increases a little, on the 2nd day

No 4

Lab of Chemistry of Protein Metabolism, Dept of Biochemistry of Microbes, Inst of Exptl Med, Moscow

the NH_3 content increases sharply. Then, up to the 6th day, during the period of accumulation of I, there are no changes in the distribution of N. The decline in activity and yield, beginning on the 7th day, coincides with the secondary rise in NH_3 and the decrease in amino acid N, and in the bacterial and protein N, while the residual N content increases. F. Isaacs

ASB-3LA METALLURGICAL LITERATURE CLASSIFICATION

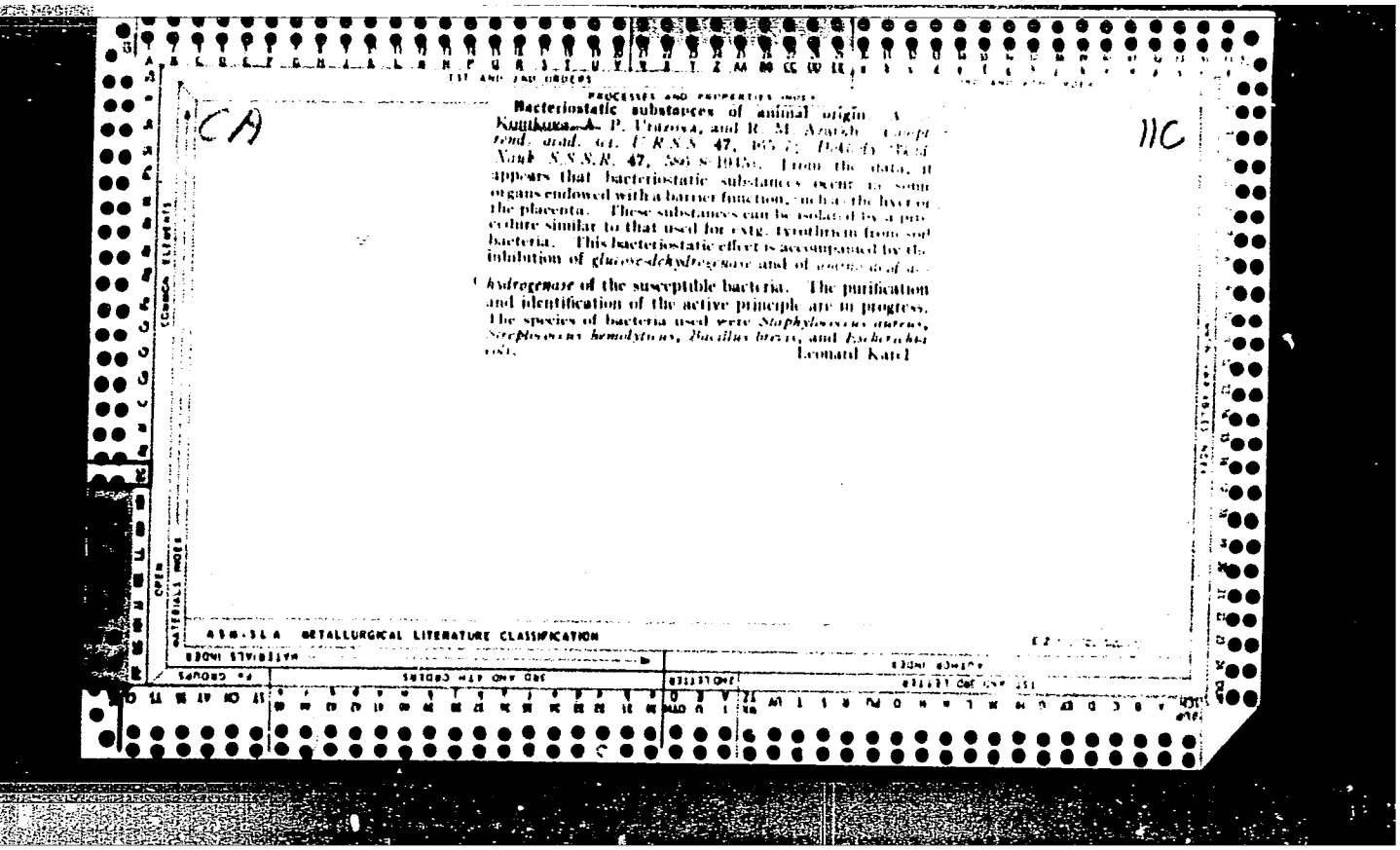


PROCESSES AND PROPERTIES INDEX

Oxidation of amino acids in suspensions of Bacillus brevis. A. S. Kenikova, P. M. Anurin, and N. N. Doblert. *Biokhimiya* 10, 82-8(1945).—Oxidative deamination by *B. brevis* is most readily obtained with the following amino acids: *l*- and *d*-glutamic acid, *l*- and *dl*-aspartic acid, *l*- and *d*-alanine, *dl*-serine, and *l*-arginine. The following amino acids are not attacked: *d*-valine, *l*- and *dl*-leucine, *l*- and *d*-isoleucine, *l*-tryptophan, *l*-tyrosine, *dl*-phenylalanine, and *dl*-3,4-dihydroxyphenylalanine. *d*- and *l*-Alanine are metabolized with equal ease. *d*-Glutamic and *d*-aspartic acids are not as readily metabolized as the *l*-isomers. No correlation exists between the intensity of oxidative deamination and their anaerobic dehydrogenation.

H. Priestley

A58-51A METALLURGICAL LITERATURE CLASSIFICATION



CA

11C

PROCESSES AND PROPERTIES INDEX

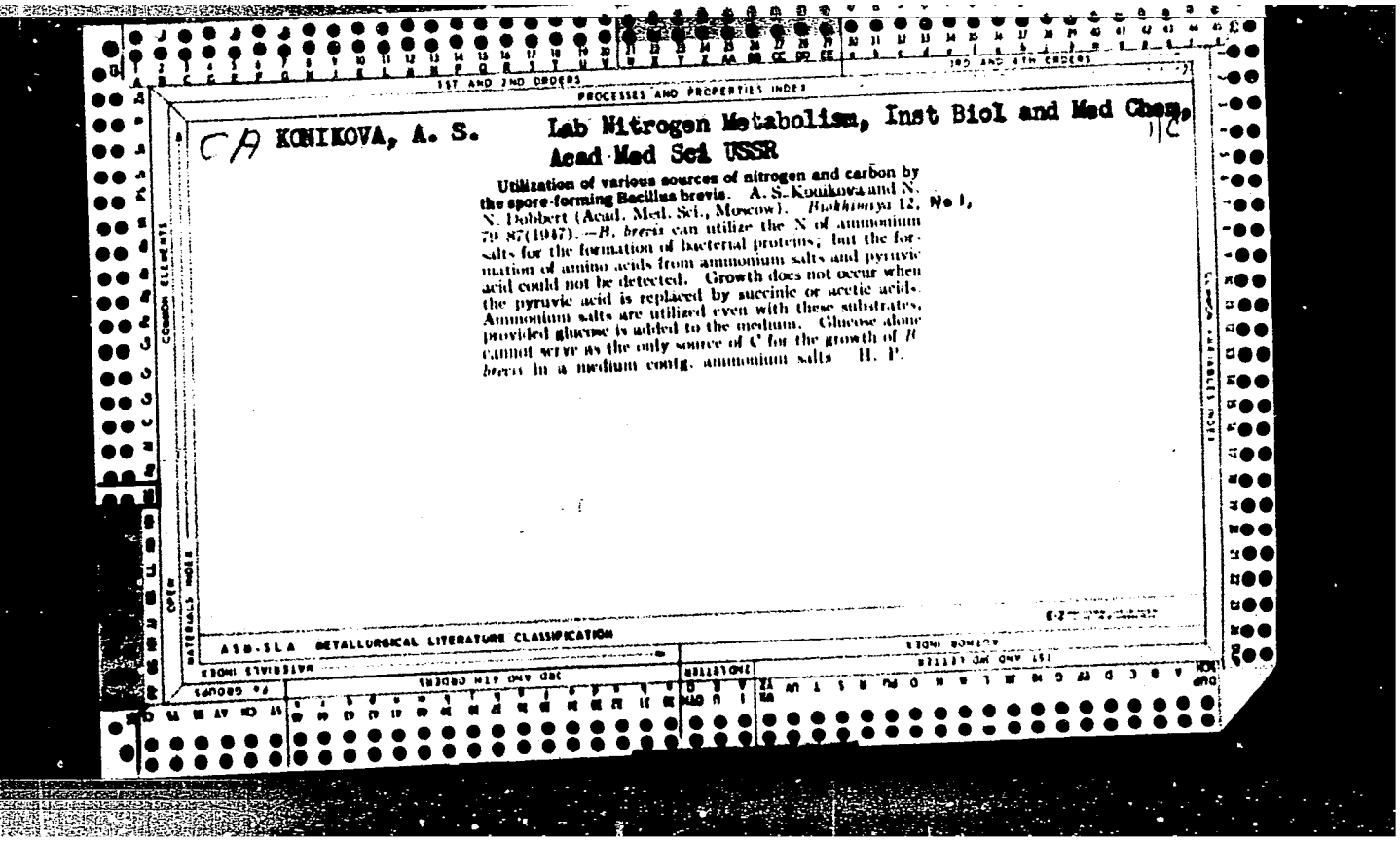
Bacteriostatic substances of animal origin. A. Kuntikova, P. Umrova, and R. M. Azarch. *Compt. rend. acad. sci. U.R.S.S.* **47**, 395-7; *Doklady Akad. Nauk S.S.S.R.* **47**, 386 (in English) (1945). From the data, it appears that bacteriostatic substances occur in some organs endowed with a barrier function, such as the liver or the placenta. These substances can be isolated by a procedure similar to that used for extg. tyrothricin from soil bacteria. This bacteriostatic effect is accompanied by the inhibition of *glucose-dehydrogenase* and of *hydrogenase* of the susceptible bacteria. The purification and identification of the active principle are in progress. The species of bacteria used were *Staphylococcus aureus*, *Streptococcus hemolyticus*, *Bacillus brevis*, and *Escherichia coli*.

Leonard Katz

456-51A METALLURGICAL LITERATURE CLASSIFICATION

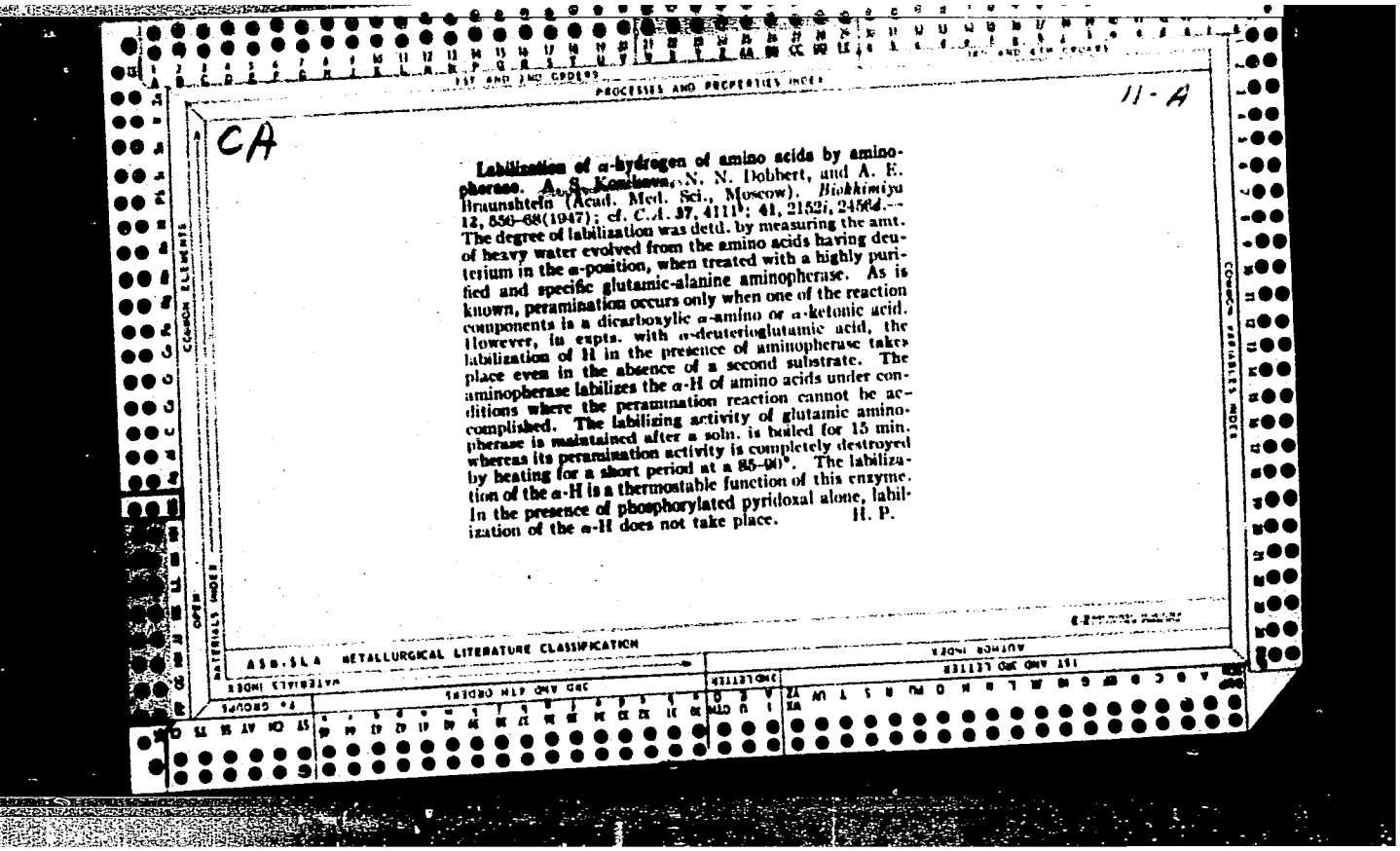
~~KNOTKOVA, A. S.~~ KONIKOVA, A.S

"Amino-Acid Metabolism of Bacteria," Uspekhi sovrem. biokhimii (Advances in Modern Biochemistry), 1, 1947, 99-141



CA KONIKOVA, A. S. Lab Nitrogen Metabolism, Inst Biol and Med Chem, Acad Med Sci USSR 11C

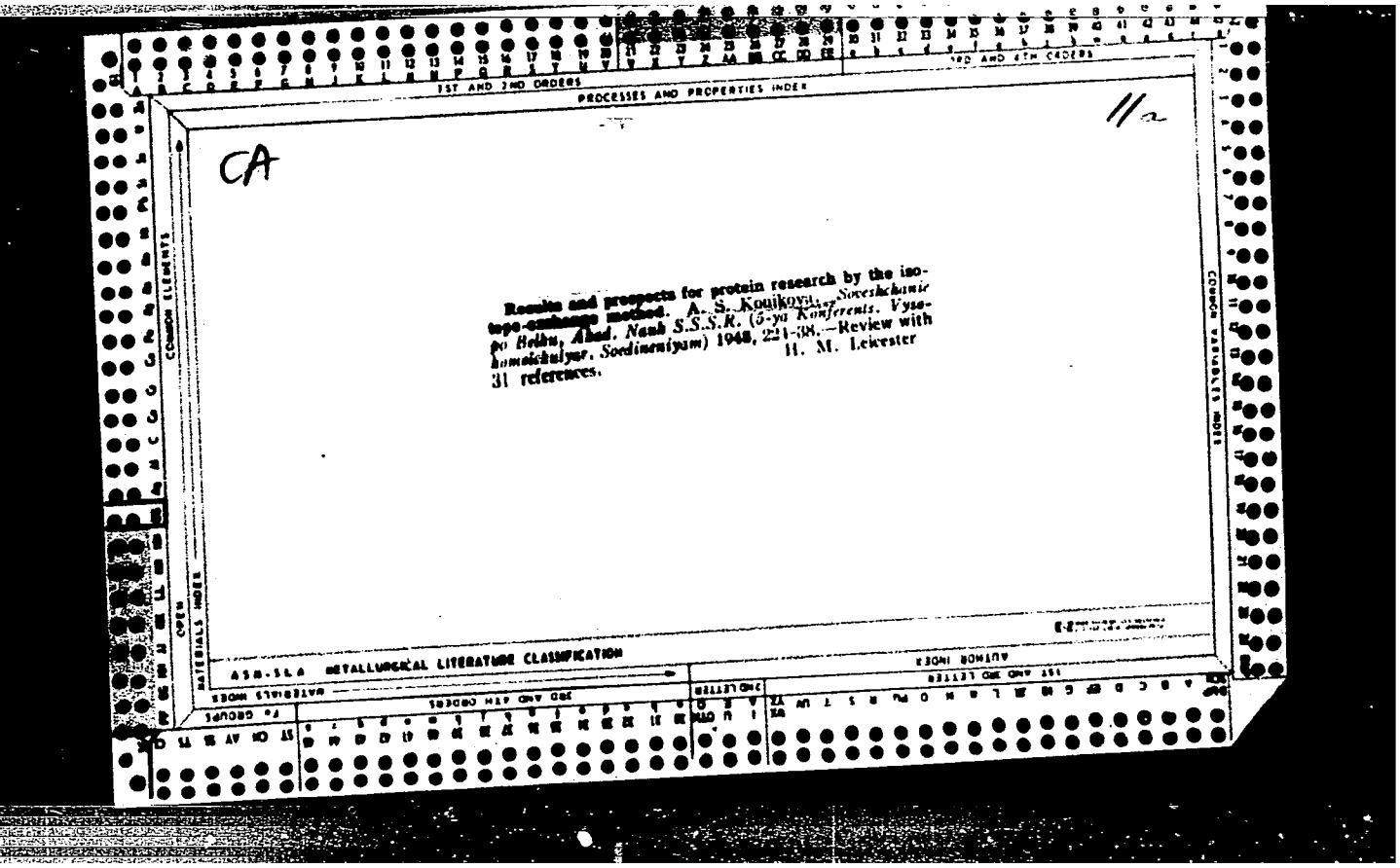
Utilization of various sources of nitrogen and carbon by the spore-forming Bacillus brevis. A. S. Konikova and N. N. Dobbert (Acad. Med. Sci., Moscow). *Biokhimiya* 12, No 1, 79-87(1947).—*B. brevis* can utilize the N of ammonium salts for the formation of bacterial proteins; but the formation of amino acids from ammonium salts and pyruvic acid could not be detected. Growth does not occur when the pyruvic acid is replaced by succinic or acetic acids. Ammonium salts are utilized even with these substrates, provided glucose is added to the medium. Glucose alone cannot serve as the only source of C for the growth of *B. brevis* in a medium contg. ammonium salts. H. P.



CA

11-A

Labilization of α-hydrogen of amino acids by aminopherase. A. S. Konikova, N. N. Dobbert, and A. E. Braunshtein (Acad. Med. Sci., Moscow). *Biokhimiya* 12, 556–68(1947); cf. *C.A.* 37, 4111; 41, 2152i, 2456d.—The degree of labilization was detd. by measuring the amt. of heavy water evolved from the amino acids having deuterium in the α-position, when treated with a highly purified and specific glutamic-alanine aminopherase. As is known, peramination occurs only when one of the reaction components is a dicarboxylic α-amino or α-ketonic acid. However, in expts. with α-deuterioglutamic acid, the labilization of H in the presence of aminopherase takes place even in the absence of a second substrate. The aminopherase labilizes the α-H of amino acids under conditions where the peramination reaction cannot be accomplished. The labilizing activity of glutamic aminopherase is maintained after a soln. is boiled for 15 min. whereas its peramination activity is completely destroyed by heating for a short period at a 85–90°. The labilization of the α-H is a thermostable function of this enzyme. In the presence of phosphorylated pyridoxal alone, labilization of the α-H does not take place. H. P.



KONIKOVA, A. S. PA 64T28

USSR/Chemistry - Synthesis Jan/Feb 1948
Chemistry - Amino Compounds

"The Formation of Amino Nitrogen From Ammonium and Alpha-Keto Acids in Suspensions of B. Subtilis," A. S. Konikova, M. G. Kritsman, L. M. Yakobson, Lab of Chem of Nitrogen Replacement, Inst of Biol and Med Chem, Acad Med Sci USSR, Moscow, 2½ pp

"Biokhim" Vol XIII, No 1

Results of studies conducted to determine the effects of aminization of suspensions of B. subtilis with pyroracemic acid, alpha-ketoglutaric acid, and phenyl-pyroracemic acid. Submitted 13 May 1947.

64T28

KONIKOVA, A. S.

PA 3/49T72

USSR/Medicine - Bacteria, Culture Mar/Apr 48
Medicine - Chemistry

"Utilization of Amino Acids of L and D Configuration in Cultures of B. Brevis," A. S. Konikova, M. M. Dobbert, Chem of Nitrogenous Exchange Lab, Biol and Med Chem Inst, Acad Med Sci USSR, 9 pp

"Biokhimiya" Vol XIII, No 2

Describes experiments. Lists various l-amino acids which may be used by B. brevis as sole source of nitrogen and carbon. Addition of glucose accelerates growth. Lists various d-amino acids in which B. brevis do not grow. Addition of glucose enables these acids to serve as nitrogen-feeding [redacted] 3/49T72

USSR/Medicine - Bacteria, Culture (Contd) Mar/Apr 48

substrate; d-amino acids enter into composition of B. brevis albumen. Submitted 25 May 47.

3/49T72

KONIKOVA, A. S.

PA 12/49T75

USSR/Medicine - Bacteria
Medicine - Microorganisms

May/Jun 48

"Review of A. M. Kuzmin's Book, 'Chemistry and Biochemistry of Pathogenic Microbes,'" A. S. Konikova and L. M. Yakobson, 2½ pp

"Biokhimiya" Vol XIII, No 3

Chapter-by-chapter review. Gives book a lukewarm reception. Some chapters are useful, others need rewriting. Published by Medgiz, Moscow, 1946, 276 pp, 10,000 copies.

12/49T75

KONIKOVA, A. S.

USSR/Medicine - Enzymes
Medicine - Bacteria, Subtilis

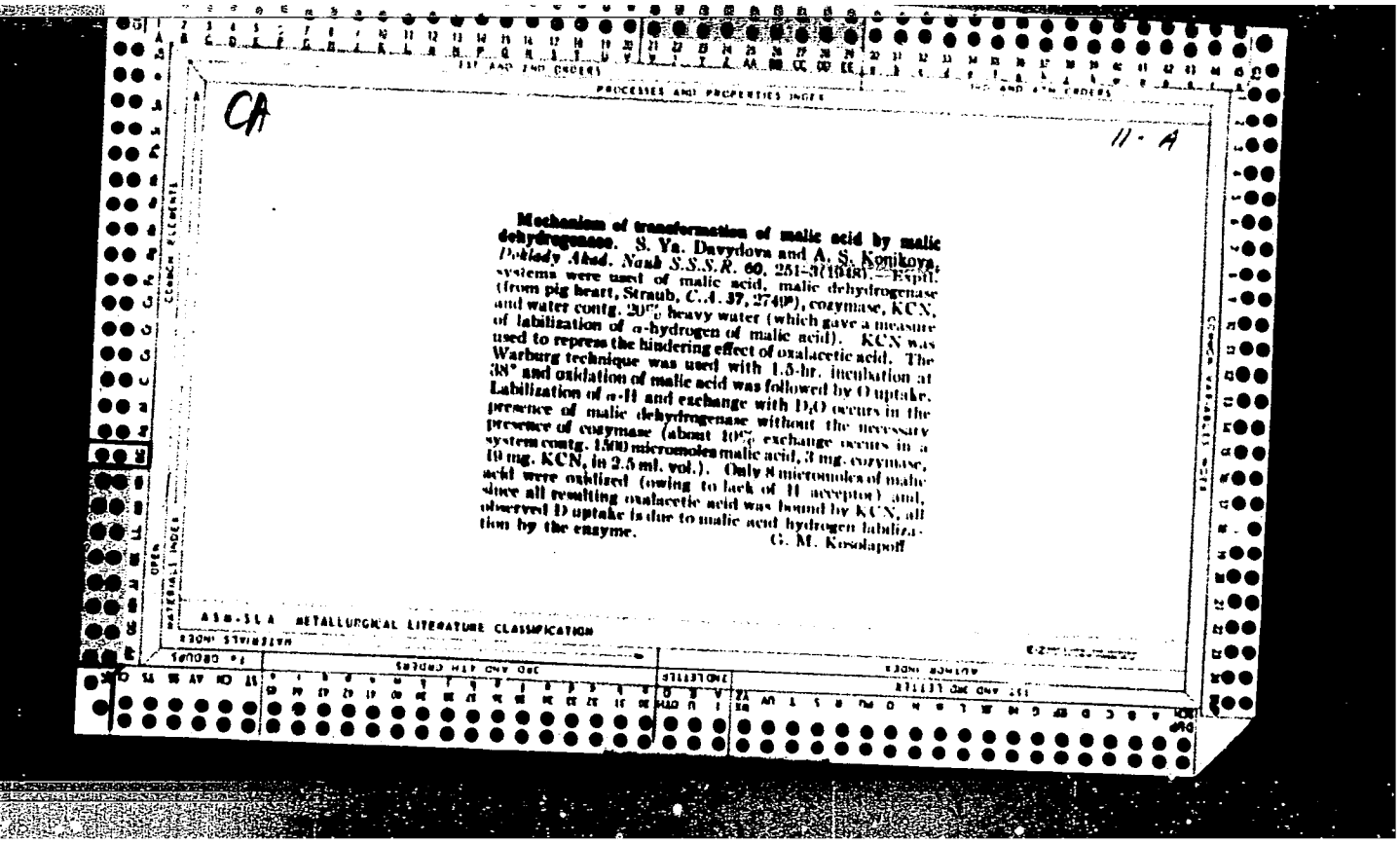
Jul/Aug 48

"Formation of Amino Nitrogen from Ammonia and Alpha-Keto Acids With the Aid of B. Subtilis Ferments," M. G. Kritsman, L. M. Yakobson, and A. S. Konikova, Inst of Biol and Med Chem, Acad Med Sci USSR, Moscow, 4½ pp

"Biokhimiya" Vol XIII, No 4

The ferment preparations (I) of the vegetative form of B. subtilis and phosphate extracts from an acetone preparation of these bacteria form NH_2-N from ammonia and pyroracemic acid. In the presence of ammonia, I can also form NH_2-N from α-ketoglutaric acid. Spore suspenseion and spores treated with acetone cannot do this. Submitted 16 Dec 47.

PA 12/49T80

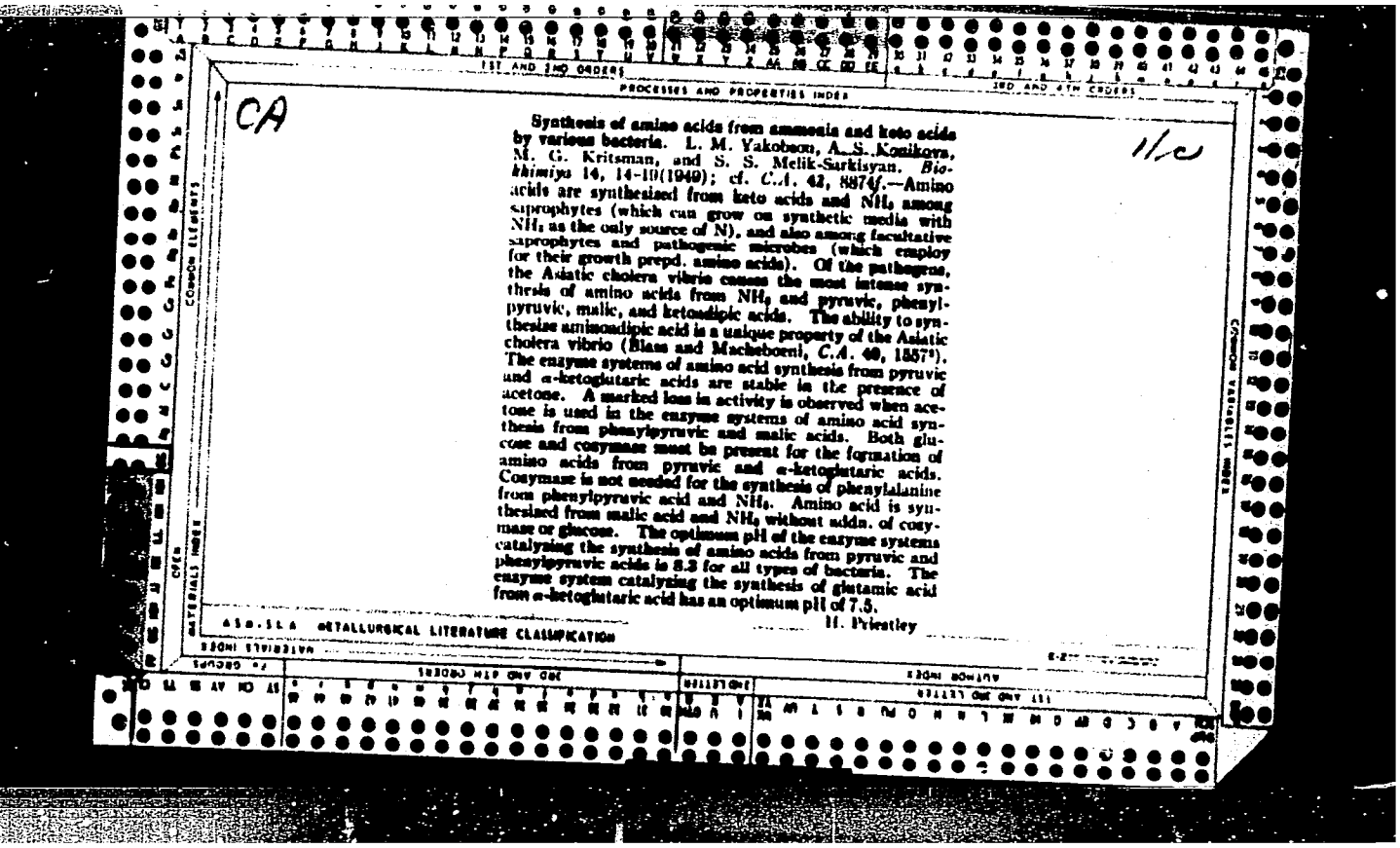


CA

11-A

Mechanism of transformation of malic acid by malic dehydrogenase. S. Ya. Davydova and A. S. Konikova. *Doklady Akad. Nauk S.S.S.R.* 60, 251–3(1948).—Expts. systems were used of malic acid, malic dehydrogenase (from pig heart, Straub, *C.A.* 37, 2749), cozymase, KCN, and water contg. 20% heavy water (which gave a measure of labilization of α-hydrogen of malic acid). KCN was used to repress the hindering effect of oxalacetic acid. The Warburg technique was used with 1.5-hr. incubation at 38° and oxidation of malic acid was followed by O uptake. Labilization of α-H and exchange with D_2O occurs in the presence of malic dehydrogenase without the necessary presence of cozymase (about 10% exchange occurs in a system contg. 1,500 micromoles malic acid, 3 mg. cozymase, 10 mg. KCN, in 2.5 ml. vol.). Only 8 micromoles of malic acid were oxidized (owing to lack of H acceptor) and, since all resulting oxalacetic acid was bound by KCN, all observed D uptake is due to malic acid hydrogen labilization by the enzyme.

G. M. Kresolapoff



CA

11/2

Synthesis of amino acids from ammonia and keto acids by various bacteria. L. M. Yakobson, A. S. Konikova, M. G. Kritsman, and S. S. Melik-Sarkisyan. *Biokhimiya* 14, 14-19(1949); cf. *C.A.* 42, 8874*f*.—Amino acids are synthesized from keto acids and NH_3 among saprophytes (which can grow on synthetic media with NH_3 as the only source of N), and also among facultative saprophytes and pathogenic microbes (which employ for their growth prepd. amino acids). Of the pathogens, the Asiatic cholera vibrio causes the most intense synthesis of amino acids from NH_3 and pyruvic, phenylpyruvic, malic, and ketoadipic acids. The ability to synthesize aminoadipic acid is a unique property of the Asiatic cholera vibrio (Blass and Macheboeni, *C.A.* 40, 1557[9]). The enzyme systems of amino acid synthesis from pyruvic and α-ketoglutaric acids are stable in the presence of acetone. A marked loss in activity is observed when acetone is used in the enzyme systems of amino acid synthesis from phenylpyruvic and malic acids. Both glucose and cozymase must be present for the formation of amino acids from pyruvic and α-ketoglutaric acids. Cozymase is not needed for the synthesis of phenylalanine from phenylpyruvic acid and NH_3. Amino acid is synthesized from malic acid and NH_3 without addn. of cozymase or glucose. The optimum pH of the enzyme systems catalyzing the synthesis of amino acids from pyruvic and phenylpyruvic acids is 8.2 for all types of bacteria. The enzyme system catalyzing the synthesis of glutamic acid from α-ketoglutaric acid has an optimum pH of 7.5.

H. Priestley

BA
A-III

25

Synthesis of individual amino-acids from ammonia and keto-acids by various bacteria. A. S. Kondrova, M. G. Kritzman, L. M. Yakobson, and O. P. Kuznetsova (Biochimia, 1949, 14, 223—229).—Paper chromatography was used for identification of amino-acids formed in bacterial cultures. Addition of pyruvic acid and NH_4 to suspensions of *B. coli* results in formation of alanine, aspartic acid, and glutamic acid. Acetone prep. of *B. breis*, which cannot synthesise aspartic acid, can synthesise alanine and glutamic acid from pyruvic acid and NH_4. Dialysed prep. can synthesise alanine only. *B. coli* and *B. breis* in presence of α-ketoglutaric acid and NH_4 can synthesise glutamic acid. Addition of phenylpyruvic acid and NH_4 results in formation of phenylalanine. Similar reactions are also carried out by *Vibrio cholerae*, but in addition *V. cholerae* can synthesise aspartic acid from malic acid and α-amino-adipic acid from α-ketoadipic acid.

D. H. Smyth.

KONIKOVA, A. S. PA 39/49T65

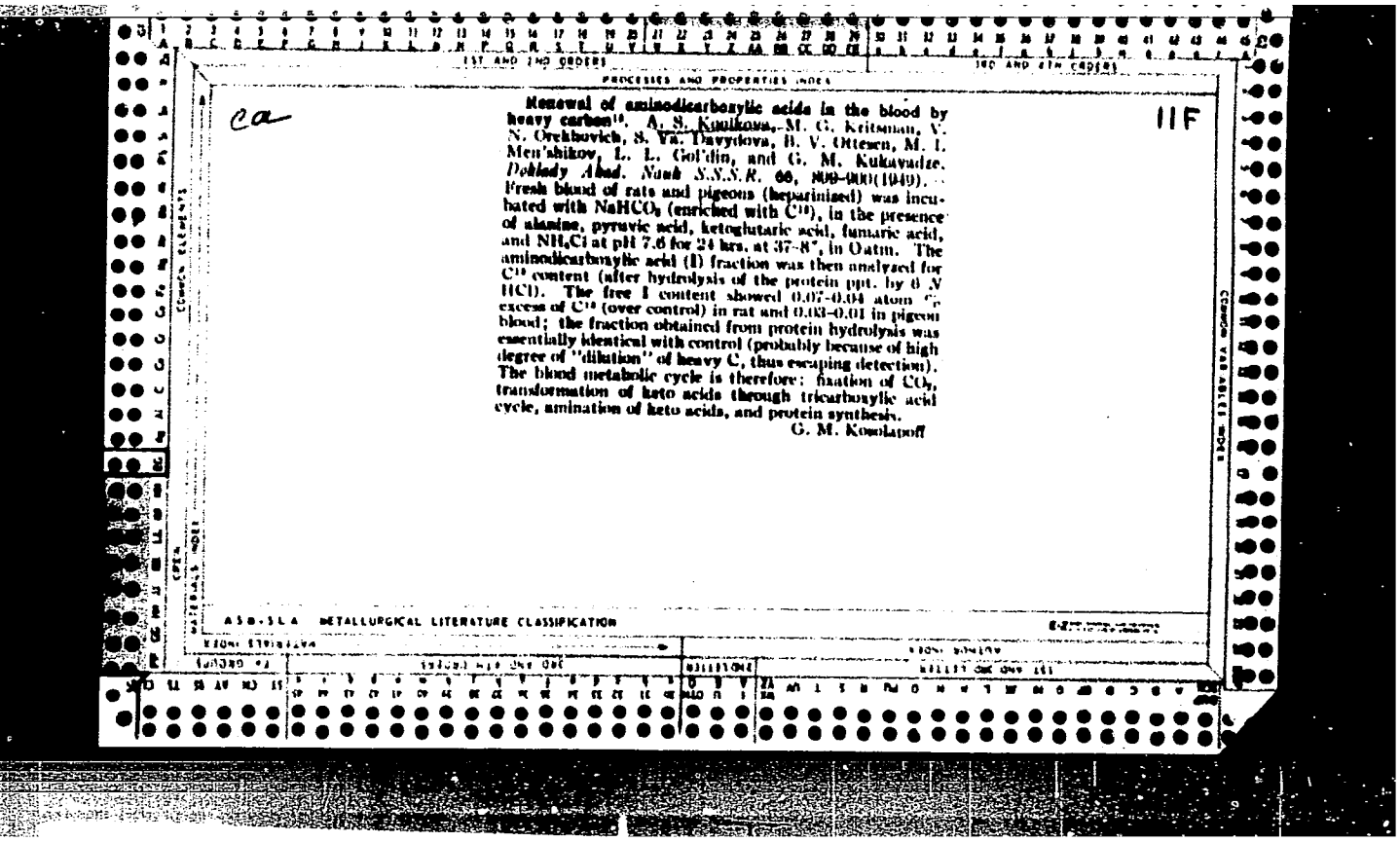
USSR/Medicine - Liver Mar 49
Medicine - Amino Acids

"Research with C^{13} on Restoring Dicarboxylic Amino Acids in the Liver," A. S. Konikova, V. N. Orekhovich, M. G. Kritsman, S. Ya. Davydova, A. B. Khokhlov, M. G. Kuhnvadze, B. V. Ottesen, M. L. Menshikov, L. L. Gol'din, Inst Biol and Med Chem, Acad Med Sci USSR, 3 pp

"Dok Ak Nauk SSSR" Vol LXV, No 3

Using C^{13}, investigated the restoration of amino-dicarboxylic acids of proteins in a normal and regenerated liver, and in sections of the liver adjoining the regenerate and removed from it. Concludes that protein exchange in regenerated tissue is characterized neither by an increased, in comparison with exchange in normal tissue, formation speed of dicarboxylic amino acids, nor by a more intensive inclusion of them in the protein. Submitted by Acad A. I. Oparin, 26 Jan 49.

39/49T65



PROCESSES AND PROPERTIES INDEX

ca

11F

Renewal of aminodicarboxylic acids in the blood by heavy carbon[14]. A. S. Kaulkova, M. G. Kritsman, V. N. Orekhovich, S. Ya. Davydova, B. V. Ottesen, M. I. Men'shikov, L. L. Gol'din, and G. M. Kukavadze. *Doklady Akad. Nauk S.S.S.R.* 66, 809-10(1949). Fresh blood of rats and pigeons (heparinized) was incubated with $NaHCO_3$ (enriched with C^{14}), in the presence of alanine, pyruvic acid, ketoglutaric acid, fumaric acid, and NH_4Cl at pH 7.6 for 24 hrs. at 37–8°, in O atm. The aminodicarboxylic acid (I) fraction was then analyzed for C^{14} content (after hydrolysis of the protein ppt. by 6 *N* HCl). The free I content showed 0.07–0.04 atom % excess of C^{14} (over control) in rat and 0.03–0.01 in pigeon blood; the fraction obtained from protein hydrolysis was essentially identical with control (probably because of high degree of "dilution" of heavy C, thus escaping detection). The blood metabolic cycle is therefore: fixation of CO_2, transformation of keto acids through tricarboxylic acid cycle, amination of keto acids, and protein synthesis.

G. M. Kosolapoff

A50-SL4 METALLURGICAL LITERATURE CLASSIFICATION

KONIKOVA, A. S.

USSR/Medicine - Blood
Amino Acids

21 Nov 49

"Formation of Amino Acids in Blood," M. G. Kritsman, A. S. Konikova, S. Ya. Davydova, Inst of Biol and Med Chem, Acad Sci USSR, 3½ pp with 2½ pp of plates.

"Dok Ak Nauk SSSR" Vol LXIX, No 3

Established that whole blood, depending on presence of certain ferment systems, can synthesize amino dicarboxylic acids from various keto- and oxy-acids in the presence of ammonium. Data obtained gives reason to assume blood is not merely conveyor of nitrogenous compounds, but takes active part in forming and rebuilding structural units of albumin molecules. Submitted 24 Sep 49 by Acad A. I. Oparin.

158T68

KHITSMAN, M.G.; KONIKOVA, A.S.

Amino-acid syntheses in living organisms and in bacterial cells.
Uspekhi Biol. Khim. 1, 203-15 '50. (MLRA 5:8)
(CA 47 no.14:7008 '53)

KONIKOVA, A.S.

(3)

Chemical Abst.
Vol. 48 No. 6
Mar. 25, 1954
Biological Chemistry

8-24-54
RML

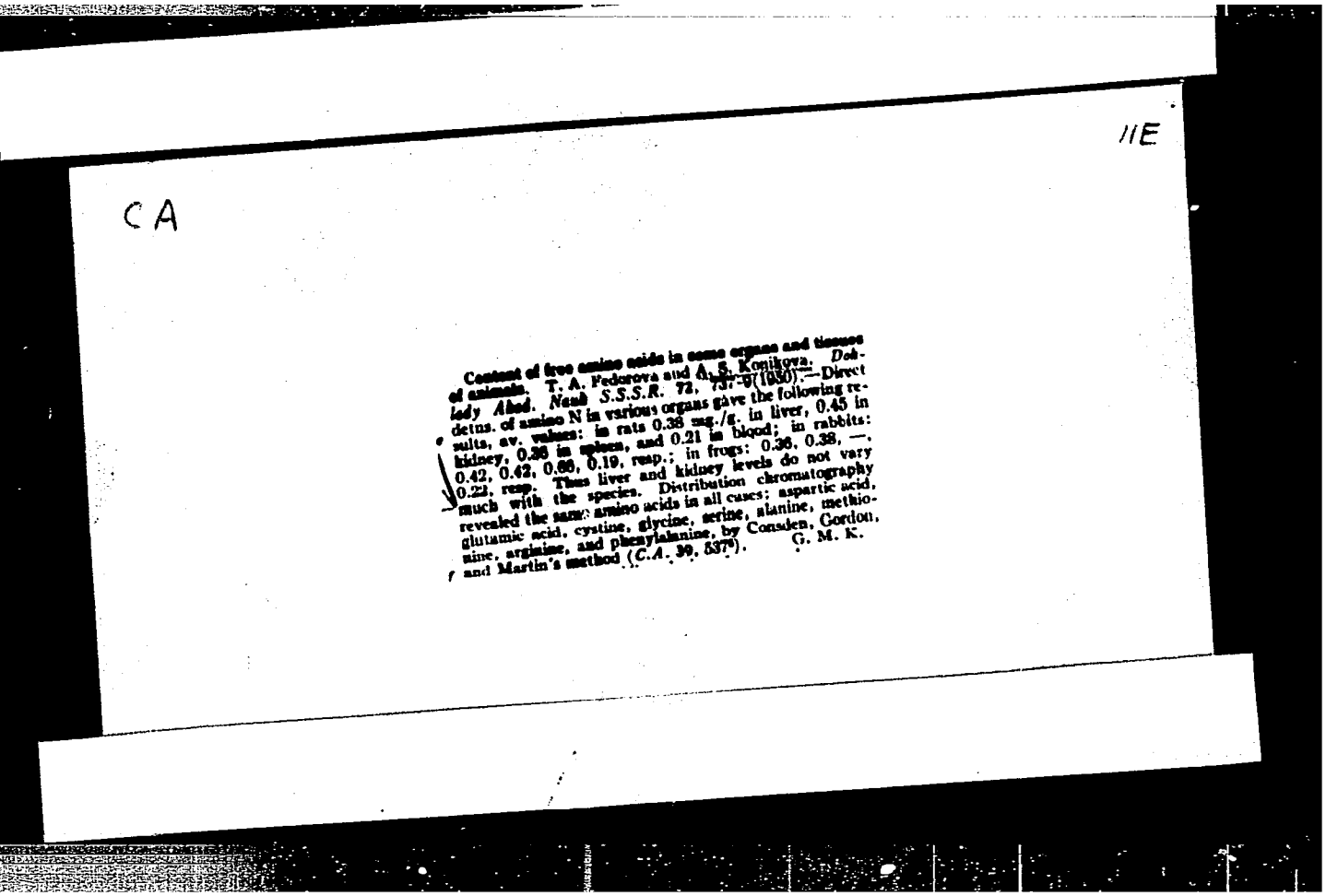
Investigation of protein metabolism in normal and in tumorous rats by means of [redacted]. A. S. Konikova and S. Ya. Davydova (Acad. Med. Sci. U.S.S.R., Moscow). *Ukrain. Biokhim. Zhur.* 22, 420–4(1950)(in Russian); cf. *C.A.* 44, 10840h.—The rate of formation of proteins in the organs and tissues of embryonic, 2-week-old, and mature rats was studied. The rats drank 4% D_2O continuously, and then for several days 99% D_2O was introduced in the amt. of 3 ml./100 g. weight. For embryonic studies, D_2O was injected subcutaneously into the pregnant rats, and the rats drank 4% D_2O during the gestation period. Two-week-old rats fed on mother's milk from birth, the mothers drinking 4% D_2O during the nursing period. Proteins in the sep. organs and tissues were detd. by phosphoric acid pptn., followed by boiling. The proteins were then washed repeatedly to remove D by phys. exchange, dried to const. wt., and incinerated. The water produced was analyzed for D by the density-flotation method. The rate of protein synthesis was judged by the excess of D in the proteins. In rats bearing M_1 sarcomas the at. percentage of D in the proteins of all organs is somewhat lower than in the proteins of normal rats. Apparently protein resynthesis is hampered during malignant growth. Labeled isotope was then introduced *in vivo* prior to grafting of sarcoma M_1; the tumor was allowed to grow for 7 days on one rat, and for ten days on the others; the proteins were sepd. from the organs, and the tumor and isotope values were detd. Only a trace of isotope was present in the tumor. Proteins are apparently not utilized by tumors during their growth; this suggests that the proteins of malignant neoplasms are constructed from low-mol. structural units entering from the total metabolic pool of the organism. Clayton F. Holoway--

CA

116

The rate of renewal of proteins of various tissues and organs. V. N. Orekhovich, A. S. Konikova, K. D. Orekhovich, and N. N. Dobbert. *Doklady Akad. Nauk S.S.S.R.* **71**, 105–7 (1950).—Detn. of D introduced into the various tissues of rats after several days of administration of D_2O to bring the av. body-fluid concn. of D_2O to 1% showed (in descending order) the uptake of D to be highest in the liver, followed by intestines, spleen, kidney, stomach, heart, lungs, and brain. The series of the ease of loss of D is: liver, kidneys, intestines, stomach, lungs, spleen, heart, and brain. The following percentage renewal series, based on the extent of D exchange, in various tissues is (in descending order): blood proteins (total), blood globulins, liver globulins, skin globulins, skin collagen, skin proteoglycan, ossein, muscle proteins, and myogen. The renewal rate is considerably lower in rats which had just given birth to young than in normal adult animals when skin and muscle proteins are considered; the values for internal organs remain normal. The newborn, however, have a rather uniform rate of renewal in all tissues and this is substantially above that of the mother.

G. M. Kosolapoff



CA

11E

Content of free amino acids in some organs and tissues of animals. T. A. Fedorova and A. S. Konikova. *Doklady Akad. Nauk S.S.S.R.* 72, 737-9(1950).—Direct detns. of amino N in various organs gave the following results, av. values: in rats 0.38 mg./g. in liver, 0.45 in kidney, 0.36 in spleen, and 0.21 in blood; in rabbits: 0.42, 0.42, 0.60, 0.19, resp.; in frogs: 0.36, 0.38, —, 0.22, resp. Thus liver and kidney levels do not vary much with the species. Distribution chromatography revealed the same amino acids in all cases; aspartic acid, glutamic acid, cystine, glycine, serine, alanine, methionine, arginine, and phenylalanine, by Consden, Gordon, and Martin's method (*C.A.* 39, 537⁹). G. M. K.

KONIKOVA, A. S.

PA 175T54

USSR/Medicine - Proteins, Formation 11 Jul 50
Deuterium

"Intensity of Protein Formation of Various Organs of Rats in Relationship to Their Age," S. Ya. Devydova, A. S. Konikova, Inst Biol and Med Chem, Acad Med Sci USSR

"Dok Ak Nauk" Vol LXXII, No 2, pp 349-350

Studies subject problem by testing intensity of occlusion and decrease of deuterium in proteins of various tissues of 2-week old and adult rats, when their water diet is 4% D_2O. Greatest intensity in adults is in the liver and least in

175T54

USSR/Medicine - Proteins, Formation 11 Jul 50
(Contd)

the muscles, while in young rats greatest is in skin and muscles and least in the liver, possibly due to former being the more rapidly developing tissues in postembryonal stage. Three tables. Submitted 22 Apr 50 by Acad A. I. Oparin.

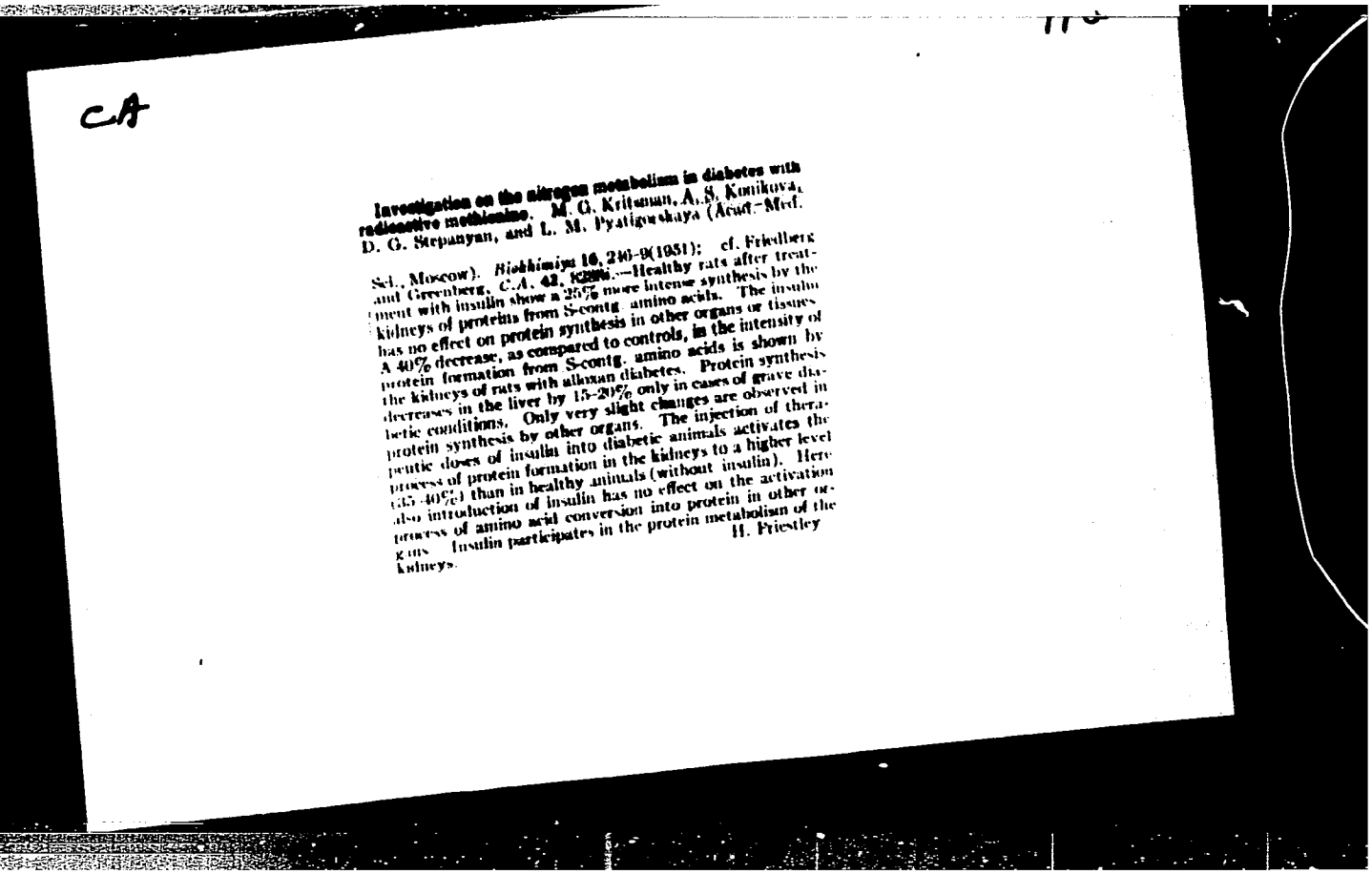
175T54

CA

112

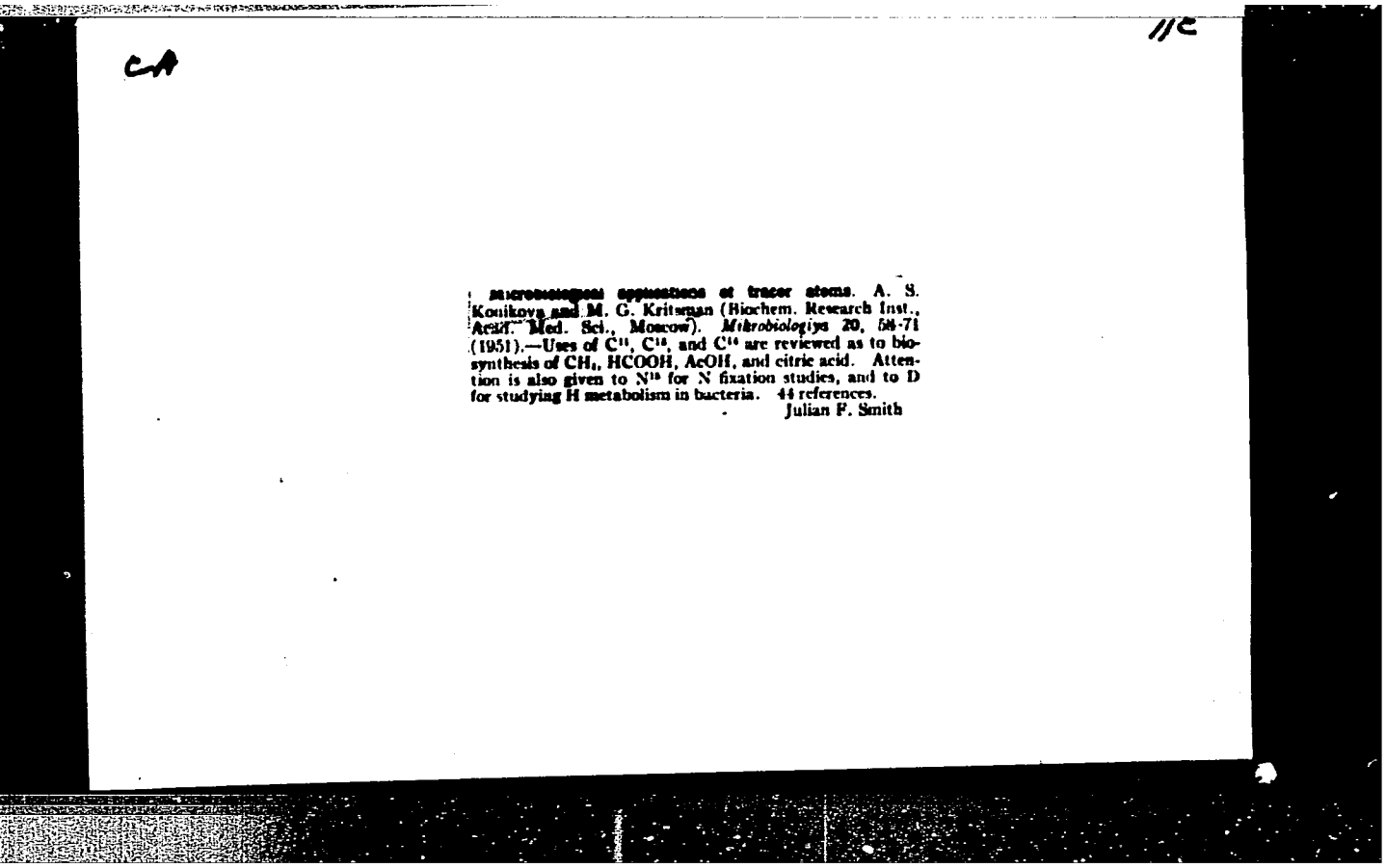
Effect of coenzyme factors on protein b[illegible] of biotin on the rate of incorporation of amin[illegible] toine of tissues and organs. A. S. Komissarov, [illegible] man, and O. P. Vasilenovskaya. *Doklady A[illegible] S.S.S.R.* 78, 97-100(1951).—Biotin acts to accelerate the incorporation of amino acids (labeled methionine) into the proteins of blood, liver, brain, kidney, muscle, and skin in rats. In animals which were supplied with 10-25 γ biotin, after 20 hrs. there was noted 43-76% increase of S-contg. components of the above-mentioned organs over controls which were given methionine alone. Possibly biotin acts as a coenzyme in the process. G. M. Kosolapoff

1951



CA

Investigation on the nitrogen metabolism in diabetes with radioactive methionine. M. G. Kritsman, A. S. Konikova, D. G. Stepanyan, and L. M. Pyatigorskaya (Acad.-Med. Sch., Moscow). *Biokhimiya* 16, 240-9(1951); cf. Friedberg and Greenberg, *C.A.* 42, 8288i.—Healthy rats after treatment with insulin show a 25% more intense synthesis by the kidneys of proteins from S-contg. amino acids. The insulin has no effect on protein synthesis in other organs or tissues. A 40% decrease, as compared to controls, in the intensity of protein formation from S-contg. amino acids is shown by the kidneys of rats with alloxan diabetes. Protein synthesis decreases in the liver by 15-20% only in cases of grave diabetic conditions. Only very slight changes are observed in protein synthesis by other organs. The injection of therapeutic doses of insulin into diabetic animals activates the process of protein formation in the kidneys to a higher level (35-40%) than in healthy animals (without insulin). Here also introduction of insulin has no effect on the activation process of amino acid conversion into protein in other organs. Insulin participates in the protein metabolism of the kidneys. H. Priestley



CA

11C

Microorganisms applications of tracer atoms. A. S. Konikova and M. G. Kritsman (Biochem. Research Inst., Acad. Med. Sci., Moscow). *Mikrobiologiya* 20, 58-71 (1951).—Uses of C^{11}, C^{14}, and C^{14} are reviewed as to biosynthesis of CH_4, HCOOH, AcOH, and citric acid. Attention is also given to N^{15} for N fixation studies, and to D for studying H metabolism in bacteria. 44 references.
Julian F. Smith

YOSHKOVA, A.S. and KRITSMAN, M.G.

Use of Tracer Atoms In Microbiology," Mikrobiologiya, 21, 98. 1951.

KONIKOVA, A. S.

PA 236T12

USSR/Medicine - Protein Metabolism, Jul/Aug 52
Toxicology, Isotopes

"Inclusion of S^{35} Methionine and C^{14} Glycine Into the Proteins of Enzymes and /Blood/ Plasma," M. G. Kritsman, A. S. Konikova, Ts. D. Osipenko

"Biokhimiya" Vol 17, No 4, pp 488-494.

The experiments described establish that inclusion of the amino acids in question into noncellular proteins takes place in human plasma and serum, the plasma and serum of a number of birds and animals, albumin, fibrin, plasmin, trypsine, and papain.

236T12

Enzyme poisons (KCN, p-hydroxyquinoline, quinalizarin, alpha-nitroso-beta-naphthol, monoiodoacetic acid, sodium azide, sodium arsenite, 2,4-dinitrophenol) inhibit the inclusion of methionine and glycine into the proteins of plasma and trypsine. The results of these experiments (carried out in vitro) open up wide possibilities of investigation by the isotope method of changes which plasma proteins undergo in the intact organism and of the utilization of proteins administered for parenteral nutrition.

236T12

1. DEMIANOVSKIY, S. Ya.; VASIL'YEVA, N. V.; KONIKOVA, A. S.

2. USSR (600)

4. Metabolism

7. Study of protein metabolism in the tussah silkworm (Antheraea pernyi G.) with the aid of radio-active methiomine. Biokimiia 17 no. 5 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassifi

KONIKOVA, A. S.

VISHNEVSKIY, A. A;GRITSMAN, Yu. Ya;KONIKOVA, A. S;MAZINA, F. V.

Investigation on the role of the nervous system in regulation of synthesis of hippuric acid by kidneys. Doklady Akad. nauk SSSR 83 no.4:621-624 1 Apr 1952. (CLML 22:2)

1. Presented by Academician A. D. Speranskiy 8 February 1952.

Konikova, N. S.

MD

Labeled methionine in the study of the effect of the diet on protein metabolism. A. S. Konikova, T. A. Fedorova, V. G. Yakovlev, and V. V. Rochkarev. *Trudy Primenen. Radioaktiv. Izotop. v Med.* (Moscow: Medgiz) 1953, 256–62; *Referat. Zhur. Khim., Biol. Khim.* 1955, No. 8870.—A study was made of the rate of inclusion of S^{35}-methionine into the proteins of different tissues of the white rat and of the disappearance rate of the labeled isotopes from the proteins of various organ tissues. The radioactivity was detd. in isolated tissue proteins 30 hrs., and 2 and 8 days after the introduction of the labeled methionine. Some of the rats were kept on starvation for the last 3 days. It was demonstrated that the inclusion of S^{35}-contg. amino acids into the organ proteins and tissues (with the exception of proteins of skeletal muscles) was considerably higher in the starved rats. The disappearance of the labeled isotopes from the proteins in the starving rats was of a lower rate than in those fed normally, with the exception of the proteins of the skeletal muscles.

B. S. Levine

(3)

KONIKOVA, A.S.

Radiomethionine and D_2O studies of the renewal of proteins in rats with biotin deficiency. M. G. Kritsman, A. S. Konikova, and O. P. Yukhnovskaya. *Trudy Primenen. Radioaktiv. Izotop. v Med.* (Moscow: Medgiz) 1953, 203-6; *Referat. Zhur. Khim., Biol. Khim.* 1955, No. 3255.—Rats with exptl. biotin deficiency received methionine-S^{35} (I) intravenously. Radioactivity was detd. 17–18 hrs. later in the proteins of the different organs. Inclusion of I into the proteins of organs of rats with biotin deficiency was lower than in the controls. The administration of 10 γ of biotin (II) per day on two successive days prior to the injection of I raised its inclusion to normal. Deficiency of II in young rats has a more pronounced neg. effect than in adult rats. *In vitro* expts. with organ tissues gave similar results. Rate of inclusion of I into the proteins of tissue slices of the liver and into blood plasma *in vitro* indicated that the addn. of II to the medium activated the inclusion of I into the proteins.

B. S. Levine

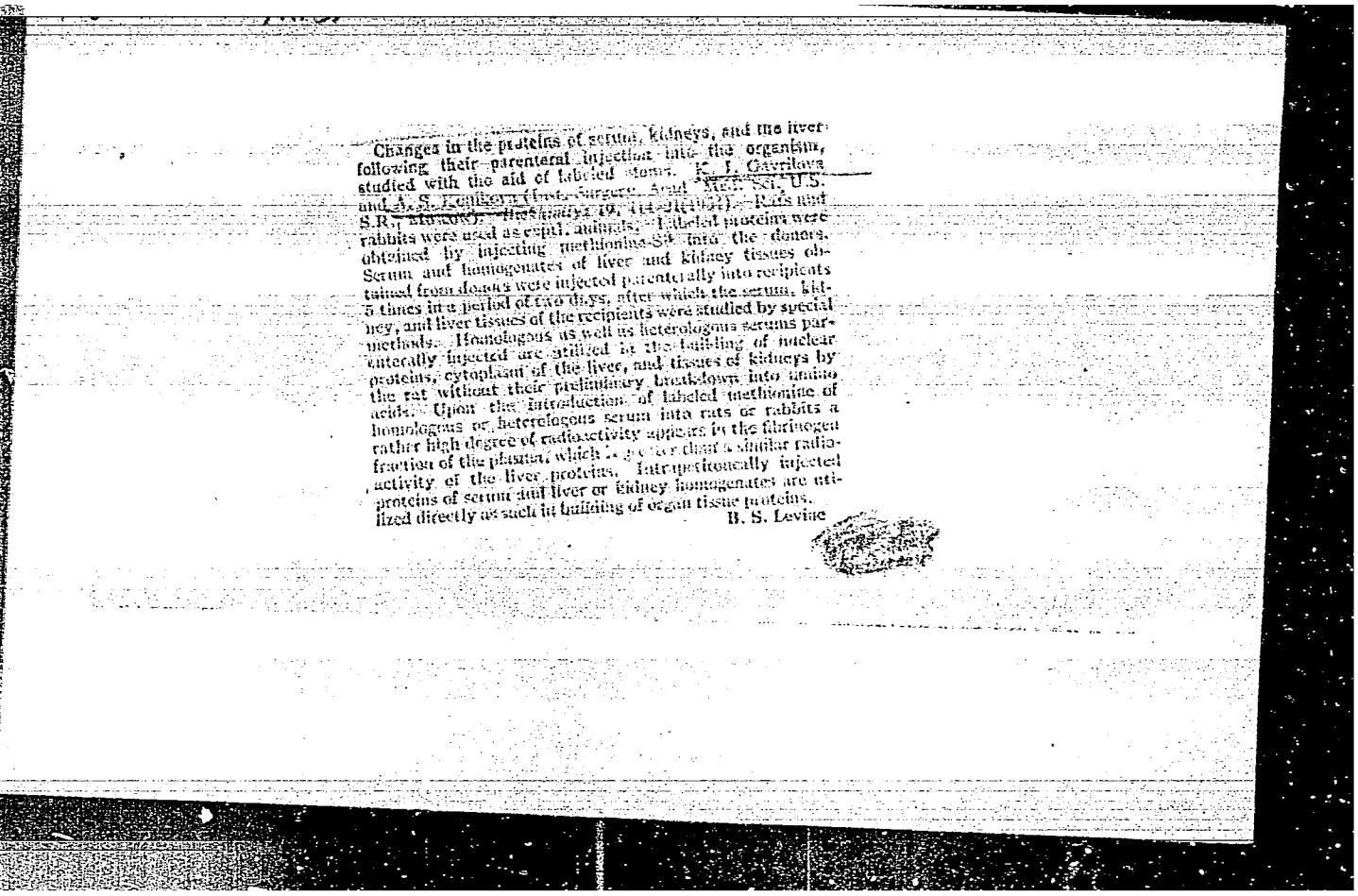
(2)

KONIKOVA A.S.

MD

Eritrin. L. M. Yakobson, A. S. Konikova, A. I. Chamova, and N. N. Dobbert. *Trudy Vitaminn. Nauch. Issledovatel. Inst. Antibiotikov* 1953, No. 1, 152–7.—Eritrin, an antibiotic extd. from liver and spleen of white rats, is an amorphous, dark-red powder, sol. in weak alkalies, acetone, and insol. in water and acids. It remains biologically active when heated at 70° for 10 min. in neutral or weak alk. or acid solns. In weakly alk. media, eritrin is inactivated in 48–60 hrs. It can be pptd. out by $(NH_4)_2SO_4$ and acids, especially by trichloracetic acid. Eritrin destroys almost completely the activity of D-amino acid oxidase; it also decreases the activiy of glutamic acid dehydrogenase by about 50%. The decrease of activity of he above substances probably is due to the presence of hemin.

V. Mihajlov



Changes in the proteins of serum, kidneys, and the liver following their parenteral injection into the organism, studied with the aid of labeled atoms. [illegible] Gavrilova and A. S. [illegible] (Inst. Surgery, Acad. Med. Sci. U.S.S.R., Moscow). Biokhimiya, 19, 414-21(1954).—Rats and rabbits were used as expt. animals. Labeled proteins were obtained by injecting methionine-S35 into the donors. Serum and homogenates of liver and kidney tissues obtained from donors were injected parenterally into recipients 5 times in a period of two days, after which the serum, kidney, and liver tissues of the recipients were studied by special methods. Homologous as well as heterologous serums parenterally injected are utilized in the building of nuclear proteins, cytoplasm of the liver, and tissues of kidneys by the rat without their preliminary breakdown into amino acids. Upon the introduction of labeled methionine of homologous or heterologous serum into rats or rabbits a rather high degree of radioactivity appears in the fibrinogen fraction of the plasma, which [illegible] a similar radioactivity of the liver proteins. Intraperitoneally injected proteins of serum and liver or kidney homogenates are utilized directly as such in building of organ tissue proteins.

B. S. Levine

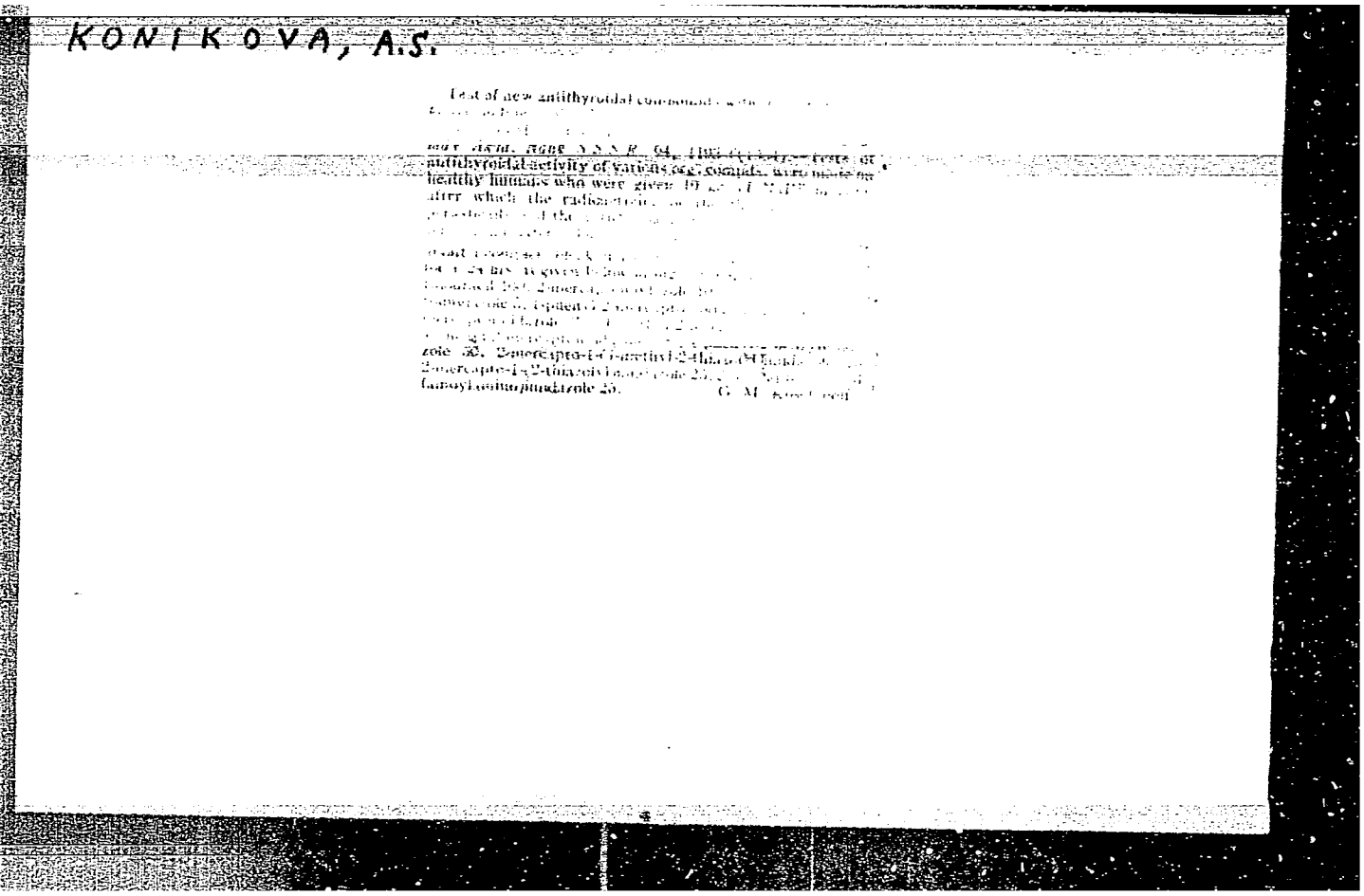
KONIKOVA, A. S.

The incorporation of amino acids into individual proteins and protein complexes. A. S. Konikova, M. G. Kritsman, and O. P. Samarina (A. V. Vishnevskii Inst. Surgery, Acad. Med. Sci. U.S.S.R., Moscow). Biokhimiya 19, 441-5 (1954).—Liver homogenates, blood serum, and blood plasma of the rat and rabbit as well as hemolymph of the oak silkworm were employed. In addn., deoxypentosenucleohistone, pentosenucleoprotein, and globulin isolated from the liver of the rat and rabbit were used. The incorporation expts. were of the *in vitro* type. The incorporation of glycine-C^{14} into a variety of isolated proteins can be clearly noted following 2 hrs. of incubation at 37°. This process of incorporation proceeds at a higher intensity in the case of isolated rabbit proteins. At 100° the incorporation of glycine-C^{14} into individual proteins or protein complexes proceeds rather intensely, but its rate remains lower in the case of protein complexes. At 100° the incorporation of glycine-C^{14} into deoxypentosenucleohistone isolated from the liver of the rat proceeds at a rate higher than in the case of the same protein isolated from the liver of the rabbit. Proteins suspended in a buffer soln. and subjected for 2 hrs. to 100° and then subjected to the interaction with labeled glycine at the same temp. acquire a lowered radioactivity. The effect of 100° upon the degree of amino acid incorporation by various proteins varies with the proteins. Enzyme inhibitors impede the process of amino acid incorporation into isolated proteins at 100° similarly as at 37°. The rate of inhibition varies. B. S. Levine

KONIKOVA, A.S.

The formation of organ and tissue [illegible] proteins [illegible]

E. I. Gavrilova and A. S. Konikova (Inst. Therapy Acad. Med. Sci. U.S.S.R., [illegible]). *Biokhimiya* 19, [illegible] (1954); cf. C.A. 48, [illegible]. Male [illegible] were used and [illegible] cholesterol [illegible] labeled serum [illegible] donor rabbits [illegible] the proteins [illegible] activity of the [illegible] 15,000 counts/min. [illegible] labeled serum [illegible] recipients. After [illegible] proteins isolated from the blood serum [illegible] the greater part of the [illegible] into organ proteins [illegible] [illegible] breakdown into amino acids. The [illegible] activities of the proteins of organs and tissues [illegible] and atherosclerotic rabbits which [illegible] from healthy [illegible] the case when [illegible] generally assumed that [illegible] sult of the changes which have occurred in the blood [illegible] compn. the normal process of protein regeneration in the heart, liver and kidney cortex from the plasma proteins is disturbed. This disturbance constitutes a [illegible] in the pathogenesis of atherosclerosis [illegible]



KONIKOVA, A.S.

Test of new antithyroidal compounds

antithyroidal activity of various org. compds. were tested on healthy humans who were given [illegible] after which the radioactivity [illegible]

zole 30. 2-mercapto-4-(3-carboxy-4-hydroxyphenyl)-5-methylthiazole 31. 2-mercapto-4-(2-chloro-5-[illegible]-zole 32. 2-mercapto-4-(2-chloro-5-[illegible]-zole 33. 2-mercapto-4-(2-chloro-5-[illegible]-zole 34. 2-mercapto-4-(2-chloro-5-[illegible]-zole 35. 2-mercapto-4-(2-chloro-5-[illegible]-zole 36. 2-mercapto-4-(2-chloro-5-[illegible]-zole 37. 2-mercapto-4-(2-chloro-5-[illegible]-zole 38. 2-mercapto-4-(2-chloro-5-[illegible]-zole 39. 2-mercapto-4-(2-chloro-5-[illegible]-zole 40. 2-mercapto-4-(2-chloro-5-[illegible]-zole 41. 2-mercapto-4-(2-chloro-5-[illegible]-zole 42. 2-mercapto-4-(2-chloro-5-[illegible]-zole 43. 2-mercapto-4-(2-chloro-5-[illegible]-zole 44. 2-mercapto-4-(2-chloro-5-[illegible]-zole 45. 2-mercapto-4-(2-chloro-5-[illegible]-zole 46. 2-mercapto-4-(2-chloro-5-[illegible]-zole 47. 2-mercapto-4-(2-chloro-5-[illegible]-zole 48. 2-mercapto-4-(2-chloro-5-[illegible]-zole 49. 2-mercapto-4-(2-chloro-5-[illegible]-zole 50. 2-mercapto-4-(2-chloro-5-[illegible]-zole

KONIKOVA, A. S.

2605. Influence of sleep caused by drugs on the rate of passage of sodium from the muscle tissue into the blood. M. V. Ivanova and A. S. Konikova *Vop. med. Khim.* 1955, 1, 408–4[illegible] *Referat. Zh. Biol.*, 1956, Abstr. No 78076 [illegible] of the radioactive Na through the capillaries of muscles was studied. Rabbits were anaesthetised with a soln. containing [illegible] and 0.75% NaCl soln. (1%) containing 10–20 μc of ^{24}Na was injected 1 cm. deep into one of the muscles of the femur. Anaesthesia reduced the rate of the passage of ^{24}Na [illegible]

2
1

UCHITEL', I.Ya.; KONIKOVA, A.S.

Some data on antibody formation. Biul. eksp. biol. i med. 40 no.12: 35-39 D '55. (MLRA 9:3)

1. Iz Instituta khirurgii imeni A.V. Vishnevskogo (dir.-chlen-korrespondent AMN SSSR prof. A.A. Vishnevskiy) AMN SSSR, Moskva.
(ANTIGENS AND ANTIBODIES,
antibody form)

KONIKOVA, A. S.

The union of peptides (glutathione) with isolated proteins. O. P. Samarina, M. G. Kritsman, and A. S. Konikova (A. V. Vishnevskii Inst. Surg., Acad. Med. Sci. U.S.S.R., Moscow). *Biokhimiya* 21, 10–16(1956).—Rabbits weighing 2.5–3.0 kg. were given 4 intraperitoneal injections (at intervals of 45 min.) of labeled glutathione (I). One hr. after the last injection the rabbits were decapitated and the blood and liver serd. The mercaptide of I and the subsequently freed I were obtained. Final results were statistically analyzed. The presence in the liver and in the erythrocytes of rabbits of radioactive I as a result of intraabdominal injection of glycine-C^{14} and of cysteine-S^{35} was established. The *in vitro* union of I with desoxypentosenucleohistone, pentosenucleoprotein, elastin, and plasma hemolyzate proteins was demonstrated. The union of peptide I with isolated proteins occurs with the formation of disulfide and more stable peptide bonds. The quant. relation among such bonds differs with the type of protein. Ten % CCl_3CO_2H fails to impede the formation of the union between the peptide I and certain of the proteins.

B. S. Levine

KONIKOVA, A.S.

The reaction of isolated proteins with their structural units. A. S. Konikova, M. G. Kritsman, and O. P. Samarina. *Doklady Akad. Nauk S.S.S.R.* 109, [illegible] (1956).—Expts. with blood serum, hemolyzate proteins, globulin, albumin, and myosin were carried out in conjunction with selected labeled amino acids [illegible] labeled in CO_2H), methionine-S^{35}, [illegible] thione labeled with S^{35} and glycine-C^{14}. The units were incubated in phosphate or Ringer buffer at 4° or 37° for 2 hrs. and the activity of the isolated proteins was then detd. Incorporation of labeled amino acids into serum proteins occurs at a rate inversely proportional to concn. of the protein; glutathione does not follow this pattern, however. The nature of the links formed in the reaction is unaffected by the change in concn. of the protein. Similar accelerating effects on incorporation of the simple amino acids is produced by lowering of concn. of the other proteins. The process is not a part of the denaturation process but is specific of protein *per se*. —C. M. Kosolapoff

3

KONIKOVA, A. S., and KRITSMAN, M. G.

"Experimental Demonstration of Metabolic Processes in Simple Proteins," a paper presented at the International Symposium on the Origin of Life on the Earth, Aug 57, Moscow.

KOMAROVA, N. S.

GAVRILOVA, K.I. [deceased]; KHODIYEV, B.M.; KOMIKOVA, A.S.

Protein formation in transplanted & freeze-dried vascular grafts [with summary in English]. Eksper.khir. 2 no.3:40-44 My-Je '57. (MIRA 10:10)

1. Iz Instituta khirurgii imeni A.V.Vishnevskogo (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A.Vishnevskiy) AMN SSSR.

(BLOOD VESSELS, transpl.
protein synthesis in transplanted freeze-dried grafts)
(PROTEINS, metab.
synthesis in transplanted freeze-dried vasc. grafts)

KRITSMAN, M.G.; SUKHAREVA, B.S.; SAMARINA, O.P.; KONIKOVA, A.S.

Quantitative characteristics of the incorporation of free amino acids into isolated proteins [with summary in English]. Biokhimiia 22 no.3:449-459 My-Je '57. (MIRA 10:11)

1. Institut khirurgii A.V.Vishnevskogo i Institut terapii Akademii meditsinskikh nauk SSSR, Moskva.
(AMINO ACIDS,
incorporation into proteins in vitro (Rus))

KONIKOVA, A.S.

In the article "Protein Synthesis," A. S. Konikova and M. G. Kritsman, Doctors of Biological Sciences, review and explain to some extent Soviet and foreign (chiefly US and British) research on protein synthesis. The authors preface their discussion of actual research with remarks emphasizing the complexity and importance of proteins, their natural formation and how it has been studied with tracer atoms, and their fate in the living organism. They mention the role of nucleic acids and conditions necessary for natural formation of proteins in various biological systems. They cite early experiments in this field and research paths leading to chemical synthesis.

The authors briefly discuss enzyme systems entering into the natural process and present certain principles involved in chemical synthesis, and mention possibilities for new vaccines afforded by discovery of the mechanism underlying the formation of immune bodies.

Konikova and Kritsman state that by attaching various polypeptides to a protein, basic proteins capable of generating antibodies with differing specificity can be synthesized, and they foresee the use of synthetic polypeptides for increasing the food value of protein products. (Nauka i Zhizn', Vol 24, No 1, Jan 57, pp 17-20)

Sum. 1305

UCHITEL', I.Ya.; KONIKOVA, A.S.

Comparing the formation of antigens and nonspecific proteins in the body [with summary in English]. Biul.eksp.biol. i med. 44 no.7: 85-89 Jl '57. (MIRA 10:12)

1. Iz Instituta khirurgii imeni A.V.Vishnevskogo (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A.Vishnevskiy) AMN SSSR, Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR prof. P.F.Zdrodovskim.

(ANTIGEN ANTIBODY REACTION,
antigen form., comparison with vorm of non-specific proteins (Rus))
(PROTEINS, metabolism,
non-specific protein form., comarison with anitgen form. (Rus))

KONIKOVA, A.S.

Current status of developmebt of the chemical industry and its significance for medicine. Eksper.khir. 3 no.5:3-7 S-O '58 (MIRA 11:11)

(CHEMICAL INDUSTRIES,
current status & significance for med. (Rus))

UCHITEL', I.Ya.; KONIKOVA, A.S.

Antibody formation in hypothermia. Zhur. mikrobiol. epid. i immun. 29 no.10:77-82 O '58. (MIRA 11:12)

1. Iz Instituta khirurgii imeni Vishnevskogo AMN SSSR.
(ANTIBODIES,
form., eff. of hypothermia (Rus))
(HYPOTHERMIA, eff.
on antibody form. (Rus))

AUTHORS: Konikova, A. S., Sukhareva, B. S., Kritsman, M. G. 20-119-4-33/60

TITLE: On the Characteristic of the Stability of Bonds Formed by the Incorporation of Amino Acids Into Isolated Proteins (K kharakteristike sily svyazey, obrazuyushchikhsya pri vklyuchenii aminokislot v izolirovannyye belki)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 119, Nr 4, pp. 749-752 (USSR)

ABSTRACT: The course of the incorporation of free amino acids in isolated proteins and in proteins of complicated biological systems was compared in several biological systems. It was found that peptides and other bonds are formed (references 1 - 4). Furthermore the position of several marked amino acids introduced was found in the peptide chains of isolated proteins. More detailed investigations showed that the ϵ-amino group of the marked lysine takes part in the peptide bond of the latter. In the present paper those bonds were characterized which are formed by the incorporation of tyrosine-1-C^{14} and glycine-1-C^{14}

Card 1/4

im isolated myosine. This was obtained by the determination of the radioactivity of protein during its imperfect hydrolysis. The condition was the following: If in the case of incorporation of the marked amino acid in isolated proteins other bonds are formed than in the case of its synthesis in the organism, the radioactivity loss during an imperfect hydrolysis of a protein marked in vitro will not correspond to the increase of the residual nitrogen. Furthermore it is necessary that the curve of the decrease(with respect to time) of its total radioactivity differs from that of the hydrolysis of the peptide bonds of an analogous albumen, however, marked in vivo. An experimental part follows in which the production methods of myosine with marking in vivo and in vitro are described. Rabbits were used for this purpose. Myosine was subjected to either alkaline or acid hydrolysis. Table 1 shows the quantitative changes of the non-protein-nitrogen, of tyrosine and of the radioactivity of myosine during its imperfect hydrolysis. The comparison between the bonds formed by the transition

KONIKOVA, A.S.; KRITSMAN, M.G.; KOROTKINA, R.N.; SUKHAREVA, B.S.; POGOSOVA, A.V.

Comparative study on the type of bonds formed upon in vitro and in vivo incorporation of amino acids into proteins. Biokhimiia 24 no.5:794-798 S-O '59. (MIRA 13:2)

1. Institut khirurgii im. A.V. Vishnevskogo in Institut terapii Akademii meditsinskikh nauk SSSR, Moskva.
(PROTEINS chem.)

KRITSMAN, M.G.; KONIKOVA, A.S. (Moskva)

Protein synthesis outside the organism in the light of investigations made by the use of radioactive tracers. Usp.sovr.biol. 48 no.2:136-154 S-O '59. (MIRA 13:3)
(PROTEINS chem.)

KOROTKINA, R.N.; KONIKOVA, A.S.; KRITSMAN, M.G.

Simple method for obtaining blood serum albumin tagged with radioactive amino acids. Lab. delo 6 no.4:18-20 Jl-Ag '60. (MIRA 13:12)

1. Institut khirurgii AMN SSSR imeni A.V. Vishnevskogo (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A.Vishnevskiy) i Institut terapii AMN SSSR, Moskva.

(ALBUMIN) (RADIOACTIVE TRACERS)

KRITSMAN, M.G.; SUKHAREVA, B.S.; KONIKOVA, A.S.; KOROTKINA, R.N.

Changes in the number of peptide bonds in isolated proteins.
Biokhimiia 25 no.1:17-23 Ja-F '60. (MIRA 13:6)

1. Institute of Therapy and Surgical Institute, Academy of Medical Sciences of the U.S.S.R., Moscow.
(MUSCLE PROTEINS chem.)

KONIKOVA, A. S., KOROTKINA, R. N., POGOSOVA, A. V., (USSR).

Comparative Analysis of the Process of Incorporation of Free Amino-Acids into Proteins in a Protein-Amino-Acid System and in the Intact Organism.

report presented at the 5th Int'l
Biochemistry Congress, Moscow, 10-16 Aug. 1961

UTCHITEL, I. Y.; KONIKOVA, A. S.

Synthesis of antibodies when under the influence of factors decreasing the activity of the organism. J. hyg. epidem., Praha 5 no.2:199-209 '61.

1. Vishnevsky Institute of Surgery, Academy of Medical Sciences of the U.S.S.R., Moscow.

(ANTIBODIES) (BLOOD PROTEINS metabolism)

LEVITOVA, Ye.N.; KONIKOVA, A.S.; KRITSMAN, M.G.

Inclusion of labeled amino acids into plasteins. Biokhimiia 26 no.6:961-965 N-D '61. (MIRA 15:6)

1. Vishnevskiy Institute of Surgery and Institute of Therapy, Academy of Mecical Sciences of the U.S.S.R., Moscow.
(AMINO ACIDS)
(PLASTEIN)

UCHITEL', I.Ya.; KHASMAN, E.L.; KONIKOVA, A.S.

Intensity of synthesis of proteins of the body during the induction phase of the formation of typhoid agglutinins. Zhur.mikrobiol.epid. i immun. 32 no.1:17-22 Ja '61. (MIRA 14:6)

1. Iz Instituta khirurgii imeni Vishnevskogo AMN SSSR.
(TYPHOID FEVER) (PROTEIN METABOLISM) (AGGLUTININS)

27.1100

S/020/61/141/002/025/027
B101/B110

AUTHORS: Babskaya, Yu. Ye., Konikova, A. S., and Kritsman, M. G.

TITLE: Study of bonds formed as a result of the inclusion of amino acids into the proteins of a living organism

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 141, no. 2, 1961, 473-476

TEXT: The authors refer to literature data according to which the bonds of amino acids with other constituents of the protein molecule may be dissimilar and may possess different stability. They checked this assumption by examining bonds formed in vivo as a result of introducing methionine-S^{35} and cysteine-S^{35} into liver protein and into the protein fractions of blood. The experimental method has already been described (DAN, 137; 710 (1961)). The proteins obtained were purified and then treated with alkali, performic acid, and thioglycolic acid. The amount of amino acid included into the protein with formation of a stable bond was estimated from the residual radioactivity remaining after this treatment. Fig. 1 presents data obtained for methionine-S^{35} two hours after its introduction

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Study of bonds formed as a result ... S/020/61/141/002/025/027
B101/B110

into the organism. In contradistinction to the liver which, preponderantly, firmly bound the methionine, the blood proteins showed a partially unstable addition of methionine. H. Tarver's assumption (see below) that unstable bonds are the result of a conversion of methionine into cysteine and addition of the latter by the formation of disulfide bonds was refuted by the fact that analogous to methionine-S^{35} marked methionine-C^{14} was used in the carboxyl group. Methionine-S^{35} and methionine-C^{14} showed the same behavior. Accordingly, besides disulfide bonds still other unstable bonds occur. While the bond between the liver and cysteine is mainly stable, preponderantly unstable bonding (up to 80-90%) occurs, similar to methionine, between blood proteins and cysteine. Examinations showed that unstably bound cysteine tended to decrease in the course of time after it had been introduced into the organism. 64 hours after introduction, however, 25% of cysteine-S^{35} was still unstably bound. This leads to the conclusion that proteins always contain both stable and unstable cysteine molecules, the ratio of stably to unstably bound radicals depending on the period of time for which the amino acid was subjected to metabolism. In

Card 2/

addition, the ratio also depends on the physiological condition of the organism. The introduction of cysteine-S^{35} into a rabbit in hypothermic condition ($24^{\circ}C$) showed that merely 6% of cysteine was still stably bound. The ratio of stable to unstable bonds is, therefore, not constant but depends on the time of inclusion of the amino acid into the organism, on the kind of protein and on the organism's functional condition. There are 4 figures and 11 references: 4 Soviet and 7 non-Soviet. The four most recent references to English-language publications read as follows: H. Tarver, C. L. A. Schmidt, J. Biol. Chem., 146, 69 (1942); T. Winnick, E. A. Peterson, D. M. Greenberg, Arch. Biochem., 21, 235 (1949); E. A. Peterson, G. M. Greenberg, J. Biol. Chem., 194, 359 (1952); H. Borsook, Chemical Pathways of Metabol., 2, 1954, p. 173.

ASSOCIATION: Institut khirurgii im. A. V. Vishnevskogo Akademii meditsinskikh nauk SSSR (Institute of Surgery imeni A. V. Vishnevskiy of the Academy of Medical Sciences USSR)

PRESENTED: June 19, 1961, by V. N. Chernigovskiy, Academician

Card 3/3

POGOSOVA, A.V.; KRITSMAN, M.G.; KONIKOVA, A.S.

Effect of urea and temperature on the process of inclusion of amino acids into isolated proteins. Biokhimiia 27 no.1:19-24 Ja-F '62. (MIRA 15:5)

1. Institute of Therapy and Institute of Surgery, Academy of Medical Sciences of the U.S.S.R., Moscow.
(PROTEINS) (UREA) (TEMPERATURE)

KONIKOVA, A. S.; KHARNAS, S. Sh.; BABSKAYA, Yu. Ye.; POGOSOVA, A. V.; AVRUTSKIY, M. Ya.

Metabolic change in deep hypothermia. Eksper. khir. i anest. no.2:58-62 '62. (MIRA 15:6)

1. Iz Instituta khirurgii imeni A. V. Vishnevskogo (dir. - deystvitel'nyy chlen AMN SSSR prof. A. A. Vishnevskiy) AMN SSSR.

(HYPOTHERMIA) (METABOLISM)

BABSKAYA, Yu.Ye.; KONIKOVA, A.S.; KRITSMAN, M.G.; POGOSOVA, A.V.; RAPOPORT, E.A.

Problems of the synthesis of specific proteins. Dokl. AN SSSR 146 no.2:460-463 S '62. (MIRA 15:9)

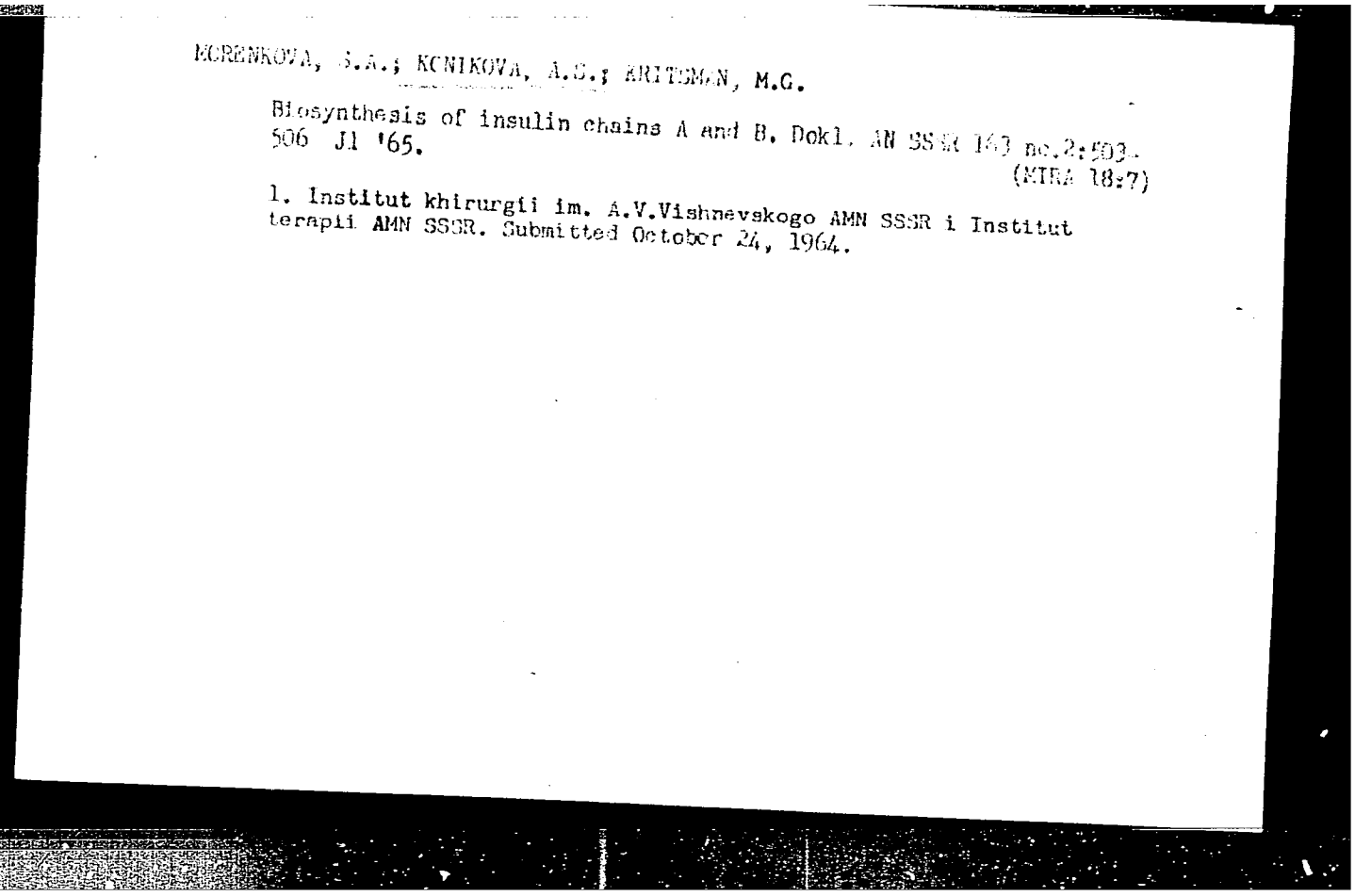
1. Institut khirurgii im. A.V. Vishnevskogo AMN SSSR i Institut terapii AMN SSSR. Predstavleno akademikom V.N. Chernigovskim. (PROTEINS)

KONIKOVA, A.S.; KRITSMAN, M.G. (Moskva)

Some data on the mechanism of protein synthesis obtained by the utilization of amino acid analogues. Usp. sovr. biol. 55 no.3:339-354 My-Je '64 (MIRA 17:3)

KONIKOVA, Anna Semenovna; KRITSMAN, Mariya Grigor'yevna; SHREYBERG, G.A., red.

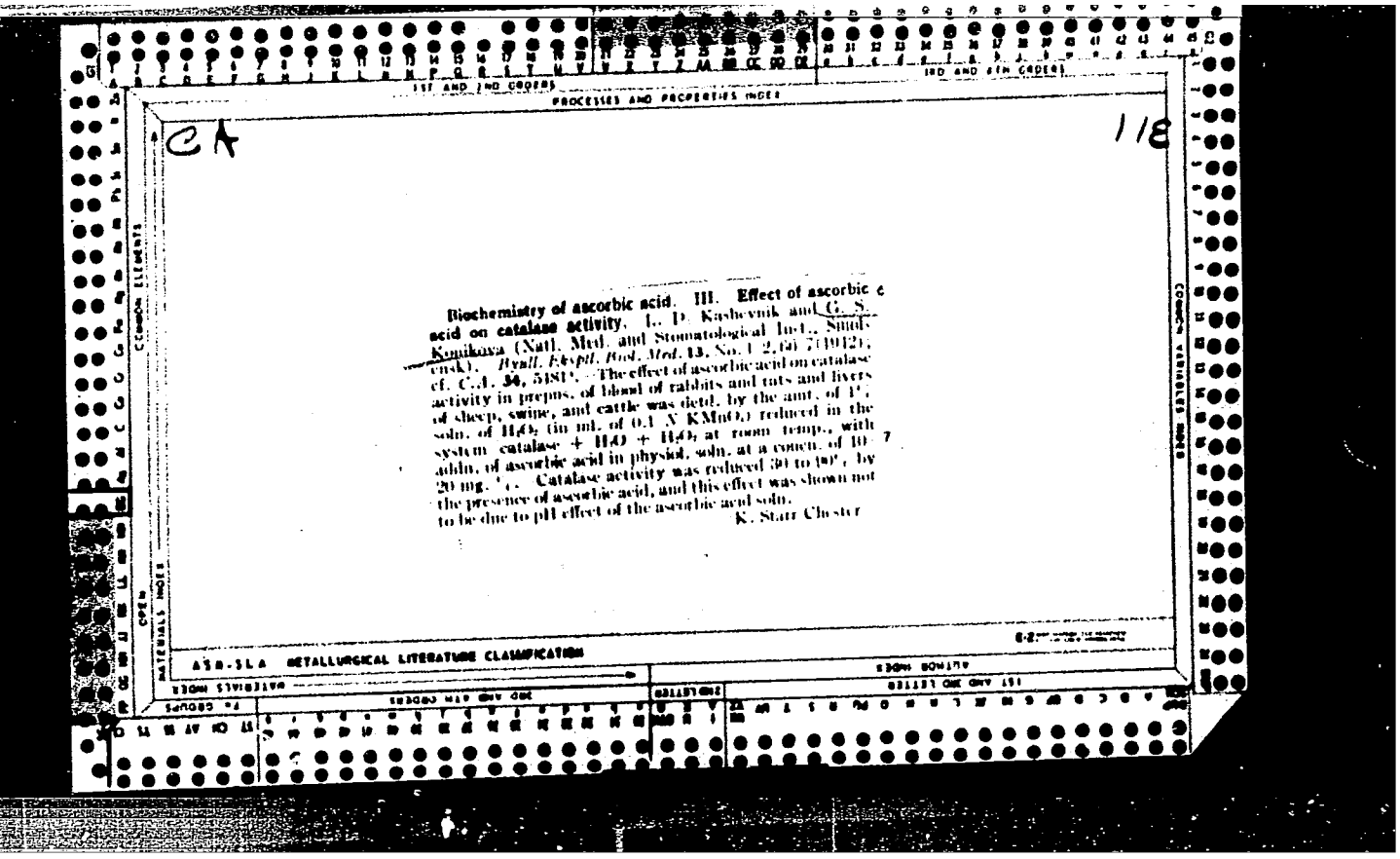
[Pathways of protein synthesis] Puti sinteza belka. Moskva, Meditsina, 1965. 357 p. (MIRA 18:6)



KORENKOVA, S.A.; KONIKOVA, A.G.; ARITSMAN, M.G.

Biosynthesis of insulin chains A and B. Dokl. AN SSSR 163 no.2:503-506 Jl '65. (MIRA 18:7)

1. Institut khirurgii im. A.V.Vishnevskogo AMN SSSR i Institut terapii AMN SSSR. Submitted October 24, 1964.



CA 118

Biochemistry of ascorbic acid. III. Effect of ascorbic acid on catalase activity. L. D. Kashevnik and G. S. Konikova (Natl. Med. and Stomatological Inst., Smolensk). *Byull. Eksptl. Biol. Med.* 13, No. 1, 2(6) 7(1942); cf. C.A. 36, 5181⁹. The effect of ascorbic acid on catalase activity in preps. of blood of rabbits and rats and livers of sheep, swine, and cattle was detd. by the amt. of H_2O_2 reduced in the soln. of H_2O_2 (in ml. of 0.1 N $KMnO_4$) reduced in the system catalase + H_2O + H_2O_2 at room temp., with addn. of ascorbic acid in physiol. soln. at a concn. of 10^{-7} 20 mg. %. Catalase activity was reduced 30 to 90%, by the presence of ascorbic acid, and this effect was shown not to be due to pH effect of the ascorbic acid soln.

K. Starr Chester

Konnikova G. S.

Cholesterol-protein complexes of the brain. G. S. Konnikova (Stalingrad Med. Inst.). *Ukrain. Biokhim. Zhur.* 22, 5–10(1950)(in Russian).—Cholesterol-protein complexes were detd. in human and other mammalian, fish, reptile, and bird brains. Cholesterol in the forebrain is combined with both the neuroglobulin and neurostromin fractions. The quantity of cholesterol bound to neurostromin is approx. twice as high as that bound to neuroglobulins. Cholesterol is bound in free, nonesterified form to brain proteins. Cholesterol in gray matter is characteristically predominantly in the form of cholesterol-protein complexes. Not all cholesterol of the cholesterol-protein complexes of the brain is bound to proteins by identical bonds, since a portion is extractable by alc.-ether, and a portion is freed only upon extn. with boiling EtOH. The dura mater was removed, the brain washed with water to disappearance of pink coloration of wash water, minced, and extd. with physiol. soln. To prevent formation of emulsion, the brain was not ground or stirred. After 24 hrs., liquid was pressed through cheesecloth, filtered through a Seitz filter and then through an ordinary filter; the filtrate was transparent. Proteins were pptd. either by $(NH_4)_2SO_4$ or by heating after acidification with HOAc in the presence of NaCl. Pptd. proteins were dialyzed, in one case to disappearance of Cl ion, and in the other to disappearance of the SO_4 ion, and dried at 40–50°. The dry protein was extd. either with $CHCl_3$, alc.-ether, or boiling EtOH. Salkowski, Liebermann-Burchard, and digitonin tests were all pos. on the exts. Sepn. of neuroglobulins and neurostromins was carried out according to A. Lenz (*Izvest. Voenno-Med. Akad.* 27, 456(1913)). Neuroglobulins were extd. with weak lactic acid soln. and neutralized with alkali. Neurostromins were sepd. next by weak alkali and pptd. with small HOAc excess. It was detd. by Liebermann-Burchard and digitonin tests that cholesterol was bound to both neuroglobulins and neurostromins.

Clayton F. Holoway

KOVNATSKIY, M.A.; GORN, L.Ye.; GRODZENCHIK, N.A.; YERMAKOVA, P.M.; KONIKOVA, G.S.; KORNIGS, A.I.; KUZNETSOVA, M.V.; MEL'NIKOVA, L.M.

Silicosis, etiology, pathogenesis, and clinical aspects. Gig. sanit., Moskva no.8:28-32 Aug 1952. (CIML 23:2)

1. Of the Clinical Department of Leningrad Scientific-Research Institute of Labor Hygiene and Occupational Diseases.

KONIKOVA, G. S.

"Disturbance of the Permeability of the Capillaries to the Proteins of the Blood Plasma in the Presence of Silicosis and Certain Forms of Silicatosis." Min Public Health RSFSR, Leningrad Sanitary-Hygenic Med Inst, Leningrad, 1955
(Dissertation for the Degree of Candidate of Biological Sciences)

SO: Knizhnaya Letopis', No. 32 6 Aug 55

KONIKOVA, G.S.

The role of the hyaluronidase hyaluronic acid system in the disturbance of capillary permeability in silicosis and silicatosis. (MLRA 9:5)
Bor'ba s sil. 2:297-304 '55.

1. Leningradskiy nauchno-issledovatel'skiy institut gigiyeny truda i profzabolevaniy
(HYALURONIDASES) (CAPILLARIES)
(LUNGS--DUST DISEASES)

[illegible] mined under normal conditions and in an artificially created small stasis. An increase of capillary

Card 1/2

T-5

USSR / Human and Animal Physiology. Respiration.

Abs Jour : Ref Zhur - Biologiya, No 1, 1959, No. 3450

Author : Konikova, G. S.
Inst : Not given
Title : Disturbance of Capillary Permeability to Plasma Proteins in Silicosis and in Some Forms of Silicatosis

Orig Pub : Tr. Yubileyn. nauchn. sessii, posvyashch. 30-letney deyat-sti Gos. n.-i. in-ta gigiyeny truda i profzabolevaniy. L., 1957, 221-225

Abstract : Capillary permeability was investigated by the method of Landis, and also of Artynov and Semiglasova, in 290 human beings that had been subjected to the effect of dust, as well as in 50 healthy persons; ESR and the protein fractions of the venous blood were also determined under normal conditions and in an artificially created small stasis. An increase of capillary

Card 1/2

USSR / Human and Animal Physiology. Respiration. T-5

Abs Jour : Ref Zhur - Biologiya, No 1, 1959, No. 3450

permeability was noted in persons under the effect of quartz dust, especially in patients with silicosis. In short contacts with asbestos dust an increase of capillary permeability, and in long contacts a decrease of capillary permeability was seen. Analogic diphasic changes in capillary permeability were observed in silicatosis due to nephelinic and olivinic dusts. In persons with altered capillary permeability due to the effects of quartz and silicate dusts, the urinary hyaluronidase activity is increased as compared with that of healthy people. It is believed that the disturbance of capillary permeability in silicosis is produced by a neuro-humoral mechanism. -- M. Ya. Mayzelis

Card 2/2

KONIKOVA, G.S.

Humoral mechanism governing impairment of capillary permeability to blood plasma proteins in silicosis and silicatosis. Arkh. pat. 22 no. 8:39-45 '60. (MIRA 14:1)
(LUNGS—DUST DISEASES) (CAPILLARIES—PERMEABILITY)

GRATSIANSKAYA, L. N.; TSIRUL'NIKOVA, I. I.; VELIKSON, I. M.;
KONIKOVA, G. S. (Leningrad)

Clinical aspects of vibration sickness in concrete workers. Gig. truda i prof. zab. no.1:34-39 '62. (MIRA 15:2)

1. Leningradskiy institut gigiyeny truda i profzabolevniy.

(VIBRATION--PHYSIOLOGICAL EFFECT)
(CONSTRUCTION WORKERS--DISEASES AND HYGIENE)

KONIKOVA, G. S.

Cholesterol metabolism in human subjects exposed to the prolonged action of lead. Terap. arkh. no.7:104-109 '61.
(MIRA 15:2)

1. Iz kliniko-biokhimicheskoy laboratorii (rukovoditel' - kandidat meditsinskikh nauk A. V. Shcheglova) klinicheskogo otdela (rukovoditel' - prof. M. A. Kovnatskiy) Gosudarstvennogo nauchno-issledovatel'skogo instituta gigiyena truda i profzabolevaniy.

(LEAD-POISONING) (CHOLESTEROL)

KONIKOVA, G.S. (Leningrad)

Cholesterol and phospholipids in the blood during prolonged exposure to some industrial poisons (lead, carbon disulfide and benzene). Terap.arkh. no.8:96-101 '62. (MIRA 15:12)

1. Iz kliniko-biokhimicheskoy laboratorii (rukovoditel' - kand. med.nauk A.V. Shcheglova) klinicheskogo otdela (rukovoditel' - prof. M.A. Kovnatskiy) Nauchno-issledovatel'skogo instituta gigiyeny truda i professional'nykh zabolevaniy (dir. - prof.Z.E. Grigor'yev).
(PHOSPHATIDES) (INDUSTRIAL TOXICOLOGY)

KONIKOVA, G.S.

Cholesterol metabolism in experimental lead poisoning. Biul.eksp. biol.i med. 54 no.11:65-67 N '62. (MIRA 15:12)

1. Iz kliniko-biokhimicheskoy laboratorii (rukovoditel' - kand. med.nauk A.V.Shcheglova) klinicheskogo otdela (rukovoditel' - prof. M.A.Kovrigatskiy) Leningradskogo nauchno-issledovatel'skogo instituta gigiyeny truda i professional'nykh zabolevaniy (dir. - prof. Z.E.Grigor'yev). Predstavlena deystvitel'nym chlenom AMN SSSR V.M.Karasikom.

(CHOLESTEROL METABOLISM)(LEAD--TOXICOLOGY)

KONIKOVA, G.S.; KUZ'MINSKAYA, G.N.

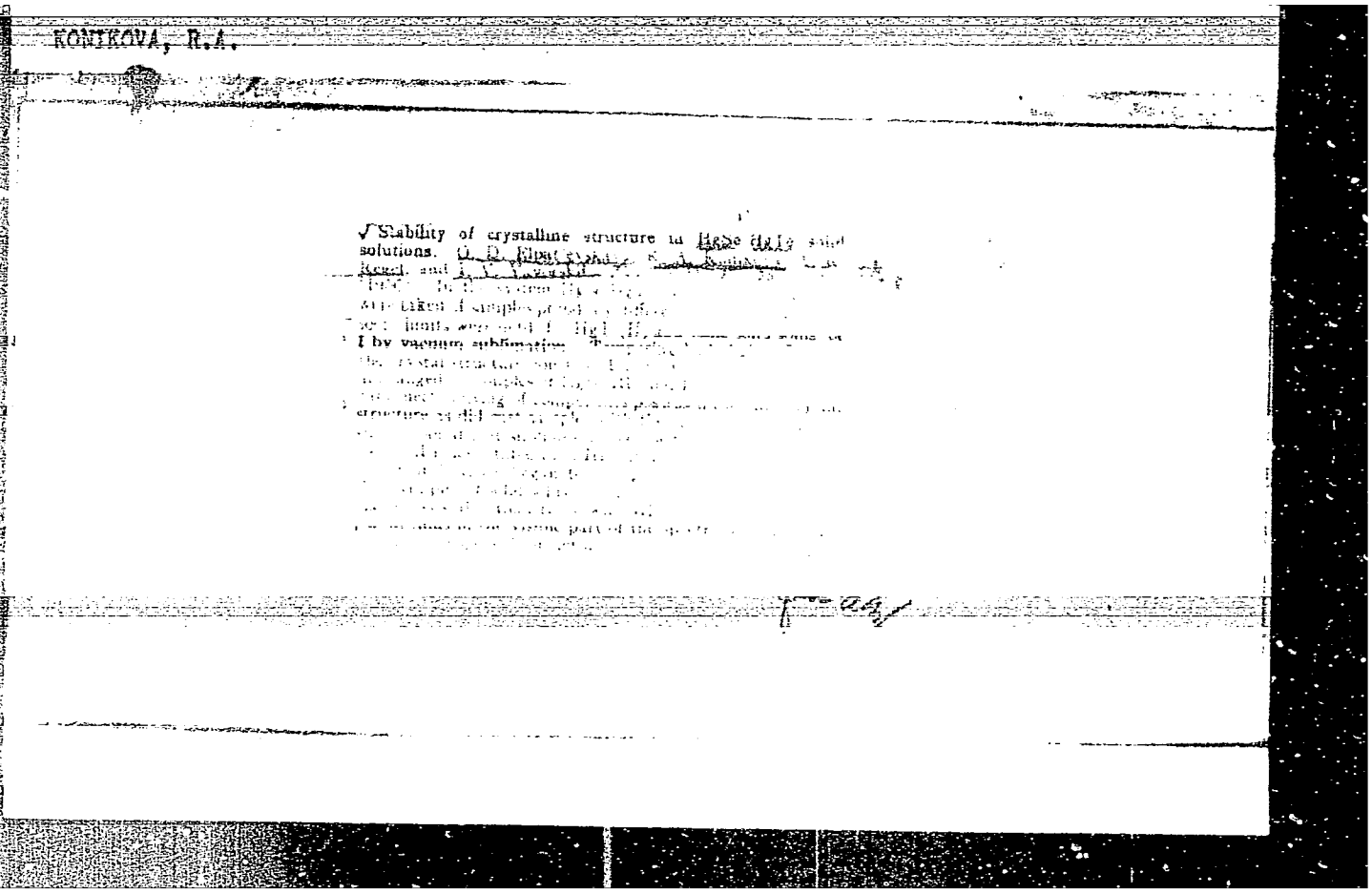
Cholesterol metabolism in experimental poisoning with sodium fluoride. Farm. i toks. 28 no.6:741-742 N-D '65.
(MIRA 19:1)

1. Kliniko-b'khimicheskaya i patofiziologicheskaya laboratoriya (rukovoditeli - kand. med. nauk A.V.Shcheglova i Zh. I.Abramova) klinicheskogo otdela (rukovoditel' - doktor med. nauk L.N. Gratsianskaya) Leningradskogo nauchno-issledovatel'skogo instituta gigiyeny truda i professional'nykh zabolevaniy.

KONIKOVA, O.V.

Spectrophotometric study of a scandium compound with xylenol orange. Zhur. anal. khim. 19 no. 1:73-78 '64. (MIRA 17:5)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni Lomonosova.



KONTKOVA, R.A.

√ Stability of crystalline structure in [illegible] solutions. [illegible]

[illegible]

[illegible] by vacuum sublimation. [illegible]