MARDER, B.B.

Antibody formation in employees of roentgenological departments vaccinated with live tularemia vaccine. Med. rad. 6 no.1:13-15 '61. (MIRA 14:3)

(TULAREMIA) (RADIATION—PHYSIOLOGICAL EFFECT)

MARDER, B.B., podpolkovnik meditsinskoy sluzhby

Second interinstitute conference on problems of radiation microbiology and immunology. Voen.-med. zhur. no.5:92-93 My '61. (MIRA 14:8)
(RADIOBIOLOGY)

LENTSNER, A.A.; MARDER, B.B.; UTKIN, Yu.P.

Problem of the possibility of transformation of para-agglutinating strains from river water into typical intestinal pathogens. Zhur. mikrobiol.epid.i immun. 30 no.7:68-71 Jl '59. (MIRA 12:11)
(BACTERIA)
(WATER - microbiology)

MARDER, B.B., podpolkovnik med. sluzhby; LENTSNER, A.A., kapitan med. sluzhby, kand. med. nauk; TITOVA-MARDER, V.L., kand.med.nauk

Bacterioscopy as a method for determining bacteria in the air and water. Voen.med.zhur. no.9:51-54 S '57. (MIRA 11:3)

(WATER, microbiology,
bacterioscopy (Rus)
(AIR, microbiology,
same)

MARDER, B.B.

"At the same time, intracutaneous tularin was rather highly reactogenic as compared with cutaneous tularin. This was demonstrated by the large percentage of acutely positive reactions.

"Thus, the allergic properties of cutaneous tularin prepared from a vaccine strain of tularemia bacteria were somewhat exceeded by the allergenic properties of intracutaneous tularin. However, experience showed that with the use of the cutaneous tularin allergenic test, more than 75% of persons inoculated were found to be immune. This led to the conclusion that cutaneous tularin can be used for determining the immune condition of inoculated groups and that the method of its application is simpler by far than the method of applying intracutaneous tularin."

MARDER, B.B

"The intracutaneous tularin test was performed according to the usual method, and the cutaneous tularin test on the under surface of the forearm according to the Popov method used at the Saratov institute, 'Mikrob.' The procedure for the cutaneous tularin test was as follows: after treatment of the skin with alcohol, two drops of tularin were applied to the skin 2-3 cm apart by shaking from an open ampule; shallow scratches were inflicted through the drops with a vaccine stylus, and the tularin was rubbed into the scratches with the ribbed surface of the stylus.

"The reaction was evaluated by a five-point system: acutely positive, positive, weakly positive, doubtful, and negative.

"On comparison of the aforementioned tularins, the predominance of doubtful and particularly of negative reactions to cutaneous tularin attracted attention; 370 reactions in all were carried out with cutaneous tularin, out of which 45.1% were positive, 10% were acutely positive, 14.9% were negative, and 9.7% were doubtful. Of 168 intracutaneous tularin tests, 63.1% were positive, 14.3% were acutely positive, 2.7% were negative, and 4.8% were doubtful.

MARDER, B.B.

"Comparative Testing of the Allergenic Properties of Cutaneous and Intracutaneous Tularin When Used for the Purpose of Detecting Immune Strata Among Persons Inoculated," by E. N. Belostotskaya, B. B. Marder, Ye. B. Maksimova and Ya. L. Gendel'man, Kaliningrad Antitularemia Station and Military Laboratory of the Baltic Coast Military District, Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii, Supplement, 1957, pp 33-34

"Mass testing of cutaneous tularin series No 10, prepared from a vaccine strain of tularemia bacteria according to A. N. Popova's method in the Tularemia Laboratory of the Institute imeni Gamaleya, was carried out in 1955 to study the allergenic properties of this series of tularin and to detect immune strata among inoculated persons. Tests with the usual intracutaneous tularin series No 31 were simultaneously set up for comparison.

"Some 523 persons between the ages of 18 and 23 were observed. Inoculations were performed on 21 and 22 March 1955 with dry antitularemia vaccine series No 481, 484, and 474, and tests were carried out 2 months after vaccination.

"Results of the cutaneous tularin test were checked after 24, 48 hours, and after 72 hours in persons who exhibited doubtful results. Results of the intracutaneous tularin test were checked within 48 hours.

BUBLIK, P.Ye.; MARDER, A.TS.; VAS'KO, T.P.; BAKUSHINSKAYA, O.A., spetsred.; VASIL'YEVA, G.N., red.; CHEBYSHEVA, Ye.A., tekhn.red.

[Purifying feed molasses using clarifiers; practices of yeast enterprises of the Ukraine] Osvetlenie kormovoi patoki s primeneniem klarifikatorov; opyt drozhzhevykh predpriiatii Ukrainy. Moskva, Pishchepromizdat, 1957. 15 p. (MIRA 12:5)
(Ukraine--Molasses) (Yeast) (Separators (Machines))

MARDENSKIY, V., kand. tekhn. nauk

Overall mechanization of fitting operations in ship repair.
Mech. transp. 24 no.3:34-35 '65. (MIRA 18:5)

MARDENSKIY, Vladimir Prokop'yevich; SHELUCHENKO, V.M., red.; VOLCHOK, K.M., tekhn. red.

[Manufacture and repair of the fuel system equipment for marine diesel engines]Izgotovlenie i remont toplivnoi apparatury sudovykh dizelei. Leningrad, Izd-vo "Rechnoi transport," 1962. 173 p. (MIRA 16:1)

(Marine diesel engines--Fuel systems)

GUSEV, Mikhail Nikolayevich, prepodavatel'; ZILIST, Petr Sigizmundovich, prepodavatel'; LEV, Yevgeniy Semenovich, prepodavatel'; LOPYREV, Nikolay Kirillovich, prepodavatel'; MARDENSKIY, Vladimir Prokop'yevich, prepodavatel'; NEMKOV, Petr Petrovich, prepodavatel'; NIKITIN, Gennadiy Mikhaylovich, prepodavatel'; SHELUCHENKO, V.M., dotsent, kand.tekhn.nauk, retsenzent; BELOV, N.M., inzh., retsenzent; GOLOVANOV, N.V., red.; VOLCHOK, K.M., tekhn.red.

[Technology of marine engineering and ship repairs] Tekhnologiia sudovogo mashinostroeniia i sudoremonta. Pod obshchei red. M.N. Guseva. Leningrad, Izd-vo "Rechnoi transport," Leningr.otd-nie. Pt.2. [Technology of ship repairs] Tekhnologiia sudoremonta. 1960. 470 p. (MIRA 13:4)

1. Kafedra tekhnologii sudostroyeniya i sudoremonta Leningradskogo instituta vodnogo transporta (for Gusev, Zilist, Lev, Lopyrev, Mardenskiy, Nemkov, Nikitin).
(Ships--Maintenance and repair)

MARDENSKIY, Vladimir Prokop'yevich; GOLOVANOV, N.V., red.; VOLCHOK, K.M., tekhn.red.

[Repair of the fuel equipment of marine diesel engines] Remont toplivnoi apparatury sudovykh dizelei. Leningrad, Izd-vo "Rechnoi transport," Leningr.otd-nie, 1960. 117 p. (MIRA 13:10)
(Marine diesel engines--Maintenance and repair)

MARDENSKIY, V.P., kand.tekhn.nauk, dotsent

Applying G.F. Proskura's method to the design of axial exhaust fans. Trudy LIIVT no.26:192-200 '59. (MIRA 14:9)
(Ships--Heating and ventilation) (Exhaust systems)

MARDENSKIY, V.P., kand.tekhn.nauk

Technology of building up worn precision pair elements for fuel system equipment. Proizv.-tekh. sbor. no.3:77-82 '59.
(MIRA 13:10)

1. Leningradskiy institut vodnogo transporta.
(Ships--Equipment and supplies)
(Instruments--Maintenance and repair)

MARDENSKIY, V., kand. tekhn. nauk, dotsent; BRYAKALOV, A., kand. tekhn. nauk

A useful book. Mor. flot. 24 no.11:46 N '64. (MIRA 18:8)

1. Leningradskiy institut vodnogo transporta (for Bryakalov).

MARDASHKO, A.

New method to determine prussic acid in plants. Nauka i zhyttia 11 no.12:37 D '61. (MIRA 15:2)

1. Uchenyy sekretar' Vsesoyuznogo selektsionno-geneticheskogo instituta imeni T.D.Lisenko.
(Hydrocyanic acid)
(Plants--Chemical analysis)

DEBOV, S.S.; MARDASHVE, S.R.; VORONOV, A.Ya.

Effect of polyadenylic acid on the incorporation of lysine into proteins by liver ribosomes in rats. Vop. med. khim. 10 no.6:635-637 N-D '64. (MIRA 19:1)

1. Kafedra biologicheskoy khimii I Moskovskogo ordena Lenina meditsinskogo instituta imeni Sechenova.

MARDASHEV, Yu.S.

Quantum aspects of catalysis. Zhur. fiz. khim. 39 no.8:1817-1822 Ag '65. (MIRA 18:9)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii.

MARDASHEV, Yu.S.; AGRONOMOV, A.Ye.

Evaluation of the surface area of nickel in Ni/Al_2O_3 catalysts. Zhur.fiz.khim. 36 no.8:1785-1787 Ag '62. (MIRA 15:8)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Nickel catalysts)

Selective assessment of the surface ...

Emmett et al, J. Amer. Chem. Soc. 59, 310, 1937; F.N. Hill et al, Ibid. 71, 2522, 1949; L. D'Or et al, J. Chem. Phys., 51, 467, 1954; F.C. Tompkins, Disc. Faraday Soc. 54, 548, 1958.

ASSOCIATION: Kafedra organicheskogo kataliza (Department of Organic Catalysis)

SUBMITTED: May 8, 1961

Card 2/2

35995
S/189/62/000/002/001/004
D228/D302

5.1190

AUTHORS: Agronomov, A.Ye., and Mardashev, Yu.S.

TITLE: Selective assessment of the surface areas of metallic catalysts on carriers

PERIODICAL: Moscow. Universitet. Vestnik. Seriya II, khimiya, no. 2, 1962, 21 - 22

TEXT: The authors give more precise information about their previous study of the chemisorption of phenol. This shows that the difference in the size of the Ni part of the surface of the Ni/Al_2O_3 catalyst, calcd. by the method of direct detn. and by the method of comparing the chemisorption capacity of thiophenol on Ni-black, Al_2O_3, and Ni/Al_2O_3, amounts to only 15 %. Thus, it is concluded that the method of comparison can be used to estimate selectively the size of the Ni surface in Ni/Al_2O_3 catalysts. There are 1 table and 8 references: 4 Soviet-bloc and 4 non-Soviet-bloc. The references to the English-language publications read as follows: P.H.

Card 1/2

AGRONOMOV, A.Ye.; MARDASHEV, Yu.S.

Structure and activity of supported nickel catalysts. Zhur. fiz.khim. 35 no.9:2047-2051 '61. (MIRA 14:10)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova i Institut organicheskoy khimii AN SSSR imeni N.D. Zelinskogo.
(Nickel) (Catalysis)

AGRONOMOV, A.Ye.; MARDASHEV, Yu.S.

Structure and activity of supported nickel catalysts. Part 1: Structural changes of the catalyst support during the deposition of nickel. Zhur.fiz.khim. 35 no.8:1666-1671 Ag '61. (MIRA 14:8)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova i Institut organicheskoy khimi AN SSSR imeni N.D. Zelinskogo.
(Nickel) (Catalysts)

PATRIKEYEV, V.V.; BALANDIN, A.A., akademik; KLABUNOVSKIY, Ye.I.; MARDASHEV, Yu.S.; MAKSIMOVA, G.I.

Selectivity towards optical isomers of adsorbents fromed in the presence of bacteria. Dokl.AN SSSR 132 no.4:850-852 Je '60. (MIRA 13:5)

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

(Adsorbents) (Isomers)

The Dependence of Activation Energy on the Relative Adsorption Coefficient

S/020/60/131/05/038/069
B004/B014

the benzene content of the starting mixture of $C_6H_6 + C_6H_{12}$ (Table 2, Fig 2). Proceeding from results obtained by other research workers, the authors discuss this dependence and arrive at the following conclusion: As long as the dehydrogenation of C_6H_{12} by means of a nickel catalyst takes place at active points of mean activation energy, which are moderately covered with C_6H_6, z_2 does not depend on the yield, m. However, as soon as these points are covered with a larger amount of C_6H_6, the benzene has an inhibitory effect, and the relation $z_2 = f(m)$ occurs, as may be seen when using catalysts with great values of z_2. Taking this into account, one obtains a value of E for the second sample, which is in close agreement with the E-values of the other catalysts. Graphical solving of the relation $Q = E - k\log z_2$ is recommended as another variant. The authors refer to a publication by A. A. Balandin and Yu. K. Yur'yev (Ref 10). There are 2 figures, 2 tables, and 12 references, 10 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov) Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences of the USSR)

SUBMITTED: December 28, 1959

Card 2/2

S/1190

B0008

AUTHORS: Agronomov, A. Ye., Balandin, A. A., Academician, Mardashev, Yu. S.

S/020/60/131/05/038/069
B004/B014

TITLE: The Dependence of Activation Energy on the Relative Adsorption Coefficient

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol 131, Nr 5, pp 1120-1122 (USSR)

TEXT: The authors of the article under review studied several nickel catalysts within a wide temperature range, using dehydrogenation of cyclohexane. The same amount of nickel was applied to different carrier substances (Al_2O_3, silica gel, kieselguhr) in equal proportions by weight. The data listed in table 1 indicate that the apparent activation energy, Q, calculated from the Arrhenius equation, and the relative adsorption coefficient, z_2, of the benzene being formed are greatly dependent on the nature of the carrier substance. These two quantities are interrelated by $Q = E - k\log z_2$ (E and k are constants). This relationship is graphically represented in figure 1. For all catalysts under consideration it was found that E was constant and 14 kcal/mole approximately. This value corresponds to the initial coordinate of the straight line depicted in figure 1, and thus represents the true activation energy. For nickel applied to silica gel (second sample) it was found that the value of z_2 increased in dependence of

Card 1/2

AGRONOMOV, A.Ye.; MARDASHEV, Yu.S.

Selective determination of the nickel surface in nickel-aluminum oxide catalysts, and their specific catalytic activity. Vest.Mosk. un.Ser. 2: Khim. 15 no.1:25-34 '60. (MIRA 13:7)

1. Kafedra organicheskogo kataliza Moskovskogo universiteta.
(Catalysts, Nickel)

MARDASHEV, Yu. S., Cand Chem Sci (diss) -- "The effect of the carrier on the structure and activity of nickel catalysts". Moscow, 1960. 11 pp (Acad Sci USSR, Inst of Organic Chem im N. D. Zelinskiy), 150 copies (KL, No 14, 1960, 127)

Comparison of the Kinetic Relative Adsorption Coefficients With Those Determined According to the BET Equation

z_{BET} are equal is assumed to confirm the second author's statement (Ref 12) that the places with a mean adsorption intensity are catalytically active. There are 1 figure, 2 tables, and 12 references, 11 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)
Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR
(Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences, USSR)

SUBMITTED: April 29, 1959

temperature, then again with pure cyclohexane. This experiment confirmed the observation of reference 11 that the activation energy is not changed up to a mixture containing 10% benzene (for the catalyst Nr 3). The two series of the values (AC according to adsorption-, kinetic data respectively) are very adjacent in the columns 3 and 4 of table 1. Thus, the BET equation may be used in the case of the cyclohexane dehydrogenation (Fig 1). The general equation of the kinetics of the monomolecular reactions (Ref 4) holds as well in the investigated region of the mixture composition, as it follows from the constancy of z (Table 2). The relative AC of the catalytic active centers turn out to be practically equal to the relative AC of the entire surface. The fact that z_k and

interesting to carry out the comparison given in the title. The absolute AC differ according to reference 7 by two orders of magnitude. The authors used the dehydrogenation reaction of cyclohexane on Ni-catalysts (the latter on carriers). The BET-AC were graphically determined from the equation (1). The straight lines for the catalysts Nr 1 and 2 (Table 1) are given in figure 1 as an example (5 catalysts were used and their method of production is described here). AC according to BET (c_{BET}) for benzene and cyclohexane were computed from the tangent of the angle of gradient of this straight line; their relation could be called the relative AC-BET (z_{BET})(Table 1, columns 1-3). The kinetic relative AC were determined from the equation (2). The reaction mentioned was carried out according to the method of reference 10. The catalyst was used in a certain quantity (volume V) so that the transformation did not exceed 30%. The equation (2) was transformed into (3) in the experiments with pure cyclohexane. Furthermore, the experiment was carried out with a mixture (with benzene) at the same

5(3) SOV/20-127-2-25/70

AUTHORS: Agronomov, A. Ye., Balandin, A. A., Academician, ~~Vardashev, Iu.S.~~

TITLE: Comparison of the Kinetic Relative Adsorption Coefficients With Those Determined According to the BET Equation

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 127, Nr 2, pp 325-328 (USSR)

ABSTRACT: The BET equation of the polymolecular adsorption which takes into account the interactions between adsorbent and adsorbed substance in the first layer and is related to the entire surface was derived in reference 1 (1938) (1). Its graphic solution makes the determination of the adsorption coefficient (AC) c possible. The second author in 1942 (Ref 2) derived an equation of the kinetics of the monomolecular reaction in a discharge system. A calculation method of the relative adsorption coefficient from kinetic data is given as well. This method made the determination of the value of these coefficients on the catalytically active centres of the surface possible. The equation (2) (identical with the equation (52) in reference 5) may be used for the determination of the relative adsorption coefficients from kinetic data.It was

Card 1/4

MARDASHEV, Yu.S.

USSR/Chemistry - Catalysts FD-2171

Card 1/1 Pub 129-11/20

Author : Agronomov, A. Ye. and Mardashev, Yu. S.

Title : Investigating the relationship between catalytic activity of Ni-Al_2O_3 and its structure and quantity of nickel in the catalyst

Periodical : Vest. Mos. un., Ser. fizikomat. i yest. nauk, 10, No 2, 83-91, Mar 1955

Abstract : Studied the cyclohexane dehydrogenation reaction over a nickel on Al_2O_3 catalyst with varying amounts of nickel. Established that the most active catalyst was one having 36.5% nickel by weight. The apparent activation energy decreases with increasing amounts of nickel. Using the adsorption method of investigation, established that the specific surface of the catalyst remains equal up to 36.5% nickel and then decreases with further additions of nickel. The porosity of the catalyst depends on the amount of nickel present. Graphs; tables. Twenty-one references (eighteen USSR).

Institution : Chair of Organic Catalysis

Submitted : June 24, 1954

MARDASHEV, YU. S.

—Adsorption of thiophene on nickel-plumbing catalysts containing various proportions of nickel. A. V. Agronomov and Yu. S. Mardashev. *Vestnik Moskov. Univ.* 10, No. 8, *Ser. Khimicheskikh Nauk* No. 3, 97–100 (1955). —Adsorption-desorption isotherms at 0° of thiophene (I) and C_4H_8 (II) on catalysts contg. 25, 50, 75 mol. % Ni, and pure Al_2O_3 and Ni were detd. Pure Ni adsorbs very little I. On the mixed catalysts, I gave a more irreversible hysteresis than did II. Neither could be completely pumped off at 0° and 10^{-5} mm., but almost twice as much I remained. The 50% catalyst permanently adsorbed the most material. Heating to 250° at 10^{-5} mm. does not displace this chemisorbed I and an irreversible hysteresis is not obtained on repeating the adsorption-desorption process. The adsorption of II on catalysts that have been satd. with I and cleaned at 250° and 10^{-5} mm. is markedly less than on fresh materials. From the relative amts. of I and II adsorbed, it is assumed that both of the polygens are oriented in the same manner, probably parallel to the surface. I. H. Scott

MARDASHEV, S.R.; SEMINA, L.A.

Crystalline histidine decarboxylase obtained from Micrococcus sp.n. Dokl. AN SSSR 156 no. 2:465-466 My '64. (MIRA 17:7)

1. Institut biologicheskoy i meditsinskoy khimii AMN SSSR.
2. Deystvitel'nyy chlen AMN SSSR (for Mardashev).

MARDASHEVA, S.R.; BUROBIN, V.A.

Determination of urocanase in the blood in carbon tetrachloride poisoning. Vop. med. khim. 9 no.1:93-94 Ja-F '63.
(MIRA 17:6)

1. Kafedra biokhimii I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova, Moskva.

MARDASHEV, S.R.; LERMAN, M.I.; BENYUMOVICH, M.S.

Glutamine transaminase in brain preparations and in cells of a strain of a differentiated human astrocytoma. Vop. med. khim. 8 no.5:547 - 549 S-O'62 (MIRA 17:4)

1. Kafedra biokhimii Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova i laboratoriya kul'tivirovaniya tkaney Instituta eksperimental'noy i klinicheskoy onkologii AMN SSSR, Moskva.

GORKIN, V.Z.; MERD [illegible], S.G.

Sixth International Biochemical Congress. Dop. sovt. biol.
54 no.2:318-331 Mr-Ap '65. (MIRA 18:4)

MARDASHEV, S.R.; YAROVAYA, L.M.

Guanosine monophosphate-synthetase reaction of E.coli. Ukr.biokhim. zhur. 37 no.5:751-760 '65. (MIRA 18:10)

1. Institut biologicheskoy i meditsinskoy khimii AMN SSSR, Moskva.

MARDASHEV, S.R.; SOKOVNINA, Ya.M.

Synthesis of hydroxamic acids from dicarboxylic amino acids and their amides in Saccharomyces cerevisiae. Mikrobiologiia 34 no.1:47-52 Ja-F '65. (MIRA 18:7)

1. Institut biologicheskoy i meditsinskoy khimii AMN SSSR.

MARDASHEV, S.R.; SEMINA, L.A.; SOKHINA, A.M.

Amino acid composition of histidine decarboxylase. Biokhimiia 30 no.6:1179-1181 N-D '65. (MIRA 19:1)

1. Laboratoriya enzimologii Instituta biologicheskoy i meditsinskoy khimii AMN SSSR i kafedra biokhimii Pervogo Moskovskogo meditsinskogo instituta, Moskva. Submitted January 21, 1965.

SEMINA, L.A.; MARDASHEV, S.R.

Purification and crystallization of microbial histidine decarboxylase. Biokhimiia 30 no.1:100-106 Ja-F '65.
(MIRA 18:6)

1. Laboratoriya enzimologii Instituta biologicheskoy i meditsinskoy khimii AMN SSSR, Moskva.

ZBARSKIY, Boris Il'ich [deceased]; IVANOV, Il'ya Il'ich; MARDASHEV, Sergey Rufovich; IL'IN, V.S., red.

[Biological chemistry] Biologicheskaia khimiia. 4. izd., ispr. i dop. Leningrad, Meditsina, 1965. 519 p. (MIRA 18:6)

MARDASHEV, Sergey Rufovich; DEBOV, S.S., red.

[Some problems in the regulation of metabolism and natural polymers] Nekotorye problemy reguliatsii obmena veshchestv i prirodnye polimery. Moskva, Meditsina, 1965. 82 p. (MIRA 18:9)

MARDASHEV, S.R.

Natural polymers. Priroda 53 no.9:35-45 '64. (MIRA 17:10)

1. Deystvitel'nyy chlen AMN SSSR.

GARAN, S.I.; MAYMIND, V.I.; MARDASHEV, S.R.

Synthesis of the sodium salt of carbamylhomoserine and its amide. Dokl. AN SSSR 154 no.6:1374-1375 F '64. (MIRA 17:2)

1. Institut biologicheskoy i meditsinskoy khimii AMN SSSR. 2. Deystvitel'nyy chlen AMN SSSR (for Mardashev).

GALEGOV, G.A.; SERGEYEVA, M.A.; MARDASHEV, S.R.

Synthesis of DL-N15—beta-methylaspartic acid. Biokhimiia 29 no.3: 497-501 My-Je '64. (MIRA 18:4)

1. Institut biologicheskoy i meditsinskoy khimii AMN SSSR, Moskva.

MARDASHEV, S.R.

Natural polymers: their biological and medical importance. Vop.med. khim. 10 no.3:227-238 My-Je '64. (MIRA 18:2)

GALEGOV, G.A.; MARDASHEV, S.R.

Effect of D,L-hexafluorovaline on the growth of Escherichia coli. Vop.med.khim. 10 no.2:216-217 Mr-Ap '64. (MIRA 18:1)

1. Laboratoriya enzimologii Instituta biologicheskoy i meditsinskoy khimii AMN SSSR, Moskva.

DEBOV, S.S.; MARDASHEV, S.R.; VOTRIN, I.I.; BLAGOVESHCHENSKAYA, Ye.V.

Ribonucleic acid polymerization activity of desoxyribonucleoprotein from the rat liver and cells from Ehrlich ascites cancer in mice. Vop. med. khim. 10 no.1:92-94 Ja-F '64. (MIRA 17:12)

1. Kafedra biokhimii I Moskovskogo ordena Lenina meditsinskogo instituta im. I.M. Sechenova.

MARDASHEV, S.R., prof.

Natural polymers and their biological and medical significance. Vest. AMN SSSR, no.4:30-43 '64. (MIRA 18:8)

1. Vitse-president Akademii meditsinskikh nauk SSSR.

MARDASHEV, S.R.; MARGORINA, L.M.; LESTROVAYA, N.N.; BROKER, T.N.

Amino acid decarboxylases in bacteria of the intestinal group.
Zh. mikrobiol. 40 no.7:25-29 Jl'63 (MIRA 17:1)

1. Iz Instituta biologicheskoy i meditsinskoy khimii AMN SSSR i Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.

MARDASHEV, S.R.

Decision of the Central Committee of the CPSU and the Council of Ministers of the U.S.S.R. on "Measures for further progress in biology and strengthening ties with practical issues" and the tasks set before the Academy of Medical Science of the U.S.S.R. Vest. AMN SSSR 18 no.6:69-77 '63. (MIRA 17:1)

[illegible]DASHEV, S.R. (Moskva)

Symposium on the pyridoxal phosphate catalysis and on the work of some laboratories of Rome and Paris. Vop. med. khim. 9 no. 3: 327-331 My-Je '63. (MIRA 17:9)

MARDASHEV, S.R.; VAN SHAO-KHUA [Wang Shao-hua]

Purification of asparaginase from the serum of guinea pigs by chromatography on a diethylaminoethylcellulose column. Dokl. AN SSSR 142 no.3:709-712 Ja '62. (MIRA 15:1)

1. Pervyy Moskovskiy meditsinskiy institut im. I.M.Sechenova.
2. Deystvitel'nyy chlen AMN SSSR (for Mardashev).
(ASPARAGINASE) (CHROMATOGRAPHIC ANALYSIS)

MARDASHEV, S.R.; FEOFILOVA, Ye.P.; GALEGOV, G.A.

Effect of β-methylaspartic acid on the growth of Escherichia coli. Mikrobiologiia 31 no.3:391-395 My-Je '62. (MIRA 15:12)

1. Institut biologicheskoy i meditsinskoy khimii AMN SSSR.
(ESCHERICHIA COLI) (ASPARTIC ACID METABOLISM)

NIKOLAYEV, A.Ya.; MARDASHEV, S.R.

Purification of bacterial asparginase by the carboxymethyl cellulose column chromatography. Biokhimiia 27 no.2:330-338 Mr-Ap '62. (MIRA 15:8)

1. Laboratory of Biochemistry of Nitrogen Metabolism of Microbes, Institute of Biological and Medical Chemistry, Moscow.
(ASPARGINASES) (CELLULOSE) (CHROMATOGRAPHIC ANALYSIS)

LERMAN, M.I.; MARDASHEV, S.R.

Transamination of dicarboxylic amino acid amides in myocardial preparations. Vop. med. khim. 8 no.4:431-432 Jl-Ag '62.
(MIRA 17:11)

1. Kafedra biokhimii I Moskovskogo ordena Lenina meditsinskogo instituta imeni Sechenova.

MARDASHEV, S.R.; BUROBIN, V.A.

Detection of histidase in the blood in carbon tetrachloride poisoning. Vop. med. khim. 8 no.3:320-322 My-Je '62. (MIRA 15:7)

1. Kafedra biokhimii I Moskovskogo ordena Lenina meditsinskogo instituta, Moskva.
(CARBON TETRACHLORIDE—TOXICOLOGY)
(HISTIDASE)

MARDASHEV, S. R.; MAMAYEVA, V. V.

Purification of microbial histidine decarboxylase. Mikrobiologiia 30 no.3:530-533 My-Je '61. (MIRA 15:7)

1. Pervyy moskovskiy meditsinskiy institut imeni I. M. Sechenova.

(HISTIDINE DECARBOXYLASE)
(MICROCOCCACEAE)

SEMINA, L.A.; MARDASHEV, S.R.

Effect of cysteamine on the enzymatic decarboxylization of amino acids. Biokhimiia 26 no.6:1065-1069 N-D '61. (MIRA 15:6)

1. Laboratory of the Biochemistry of Microbes, Institute of Biological and Medical Chemistry, Academy of Mecical Sciences of the U.S.S.R., Moscow.
(ETHANETHIOL) (AMINO ACIDS) (ENZYMES)

GALEGOV, G.A.; DEBOV, S.S.; MARDASHEV, S.R.

Synthesis of dl-2-C^{14}-β-methylaspartic acid and its carbamyl derivative. Biokhimiia 26 no.5:831-833 S-O '61. (MIRA 14:12)

1. Institute of Biological and Medical Chemistry, Academy of Medical Sciences of the U.S.S.R. and Chair of Biochemistry, 1st Medical Institute, Moscow.

(ASPARTIC ACID)

NIKOLAYEV, A.Y.; MARDASHEV, S.R.

Insoluble active compound of asparaginase with carboxymethylcellulose. Biokhimiia 26 no.4:641-645 Jl-Ag '61. (MIRA 15:6)

1. Laboratory of Biochemistry of Nitrogen Metabolism of Microbes, Institute of Biological and Medical Chemistry, Academy of Medical Sciences of the USSR, Moscow.
(ASPARIGINASE)
(CARBOXYMETHYLCELLULASE)

MARDASHEV, S.R.; SEMINA, L.A.

Inhibition of enzymatic decarboxylation of amino acids by DL-penicillamine, L-cysteine and DL-homocysteine. Biokhimiia 26 no. 1:31-39 Ja-F '61. (MIRA 14:2)

1. Institute of Biological and Medical Chemistry, Academy of Medical Sciences of the U.S.S.R., Moscow.
(VALINE) (CYSTEINE) (AMINO ACIDS) (CARBOXYL GROUP)

DEBOV, S.S.; CHZHAO TUEN-REY; MARDASHEV, S.R.

Biosynthesis of uracil by E. coli. Vop. med. khim. 7 no.3: 297-301 My-Je '61. (MIRA 15:3)

1. Chair of Biological Chemistry, "I.M. Sechenov" First Moscow Medical Institute.

(EXCHERICHIA COLI)
(URACIL)

MARDASHEV, S. R., and SEMINA, L. A. (USSR)

"The Effect of Mercaptoamino Compounds on the Enzymic Decarboxylation of Amino Acids by Microbic Materials."

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

MARDASHEV, Sergey Rufovich; POKROVSKIY, Aleksey Alekseyevich; PAVLOVA, Nina Aleksandrovna; KAPYSHEVA, V.S., red.; YEZHOVA, L.L., tekhn. red.

[Laboratory demonstrations for lectures on biological chemistry; manual for teachers] Demonstratsii k lektsiiam po biologicheskoi khimii; posobie dlia prepodavatelei. Moskva, Gos.izd-vo "Vysshaia shkola," 1961. 142 p. (MIRA 14:12)
(Biochemistry—Study and teaching)

MARDASHEV, S.R.; DEBOV, S.S.; YAROVAYA, L.M.

Biosynthesis of orotic acid from α-ureido- β-methylsuccinic and aspartic acids. Dokl. AN SSSR 134 no.3:713-716 S '60. (MIRA 13:9)

1. Pervyy Moskovskiy meditsinskiy institut im. I.M. Sechenova.
2. Deystvitel'nyy chlen AMN SSSR (for Mardashev).
(OROTIC ACID) (SUCCINIC ACID) (ASPARTIC ACID)

LERMAN, M.I.; MARDASHEV, S.R.

Enzymatic exchange of ammonia and the amide group of α-keto succinamic acid. Dokl.AN SSSR 134 no.2:460-462 S '60.
(MIRA 13:9)

1. Pervyy Moskovskiy meditsinskiy institut im. I.M.Sechenova.
2. Deystvitel'nyy chlen AMN SSSR (for Mardashev).
(SUCCINAMIC ACID) (AMMONIA) (AMIDASES)

MARDASHEV, S.R.; CHZHAO TIEN-REY

Inhibition of transamination by cysteine in the rat liver.
Dokl.AN SSSR 133 no.1:230-232 Jl '60. (MIRA 13:7)

1. Pervyy moskovskiy meditsinskiy institut imeni I.M. Sechenova. 2. Deystvitel'nyy chlen AMN SSSR (for Mardashev).
(AMINO ACID METABOLISM)
(CYSTEINE)

LEBMAN, M.I.; MARDASHEV, S.R.

Studying the biosynthesis of asparagine by the use of labelled precursors. Biokhimiia 25 no.5:946-953 S-O '60. (MIRA 14:1)

1. Chair of Biochemistry, First Medical Institute, Moscow.
(ASPARAGINE)

LERMAN, M.I.; MARDASHEV, S.R.

Synthesis of β-amide of 4-C^{14}-α-ketosuccinic acid. Biokhimiia 25 no.4:701-704 Jl-Ag '60. (MIRA 13:11)

1. Chair of Biochemistry, the 1st Medical Institute, Moscow.
(AMIDES) (OXALACETIC ACID)

LESTROVAYA, N.N.; MARDASHEV, S.R.

Effect of certain halogen derivatives of phenylalanine on decarboxylases in Streptococcus faecalis. Biokhimiia 25 no.2:227-232 Mr-Ap '60. (MIRA 14:5)

1. Laboratoriya biokhimii mikrobov Instituta biologicheskoy i meditsinskoy khimii Akademii meditsinskikh nauk SSSR, Moskva.
(ALANINE) (DECARBOXYLASES)
(STREPTOCOCCUS FAECALIS)

MARDASHEV, S.R.; DEBOV, S.S.; FEOFILOVA, E.P.

Bacteriostatic effects of 5-bromo-6-hydroxypyrimidine. Vop. med. khim. 6 no. 6:643-644 N-D '60. (MIRA 14:4)

1. Kafedra biokhimii I Moskovskogo meditsinskogo instituta imeni I.M. Sechenova i laboratoriya biokhimii mikrobov Instituta biologicheskoy i meditsinskoy khimii AMN SSSR, Moskva.
(PYRIMIDINE) (MYCOBACTERIUM) (ESCHERICHIA COLI)

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

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

(BIOCHEMISTRY)

17(3)

SOV/20-59-124-2-60/71

AUTHORS: Mardashev, S. R., Member, AMN USSR, Semina, L. A.

TITLE: The Effect of Penicillin Amine Upon Decarboxylation of Amino Acids by Microbial Preparations (Vliyaniye penitsillamina na dekarboksilirovaniye aminokislot mikrobnymi preparatami)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 2, pp 456-458 (USSR)

ABSTRACT: By adding L-penicillin amine to the aminopherase system of the liver the enzymatic activity is suppressed in vitro. Penicillin amine is said (according to Ref 1) to form with phosphopyridoxal a thiazolidine derivative. On the basis of this fact it may be assumed that penicillin amine will hamper those reactions which take place under the participation of phosphopyridoxal enzymes. In fact, DL-penicillin amine considerably suppresses D-serine dehydrogenase of N. crassa and Escherichia coli (Ref 2). In this connection the solution of the problem mentioned in the title was interesting. The authors investigated the action of penicillin amine in amino acid decarboxylases of 1) E. coli (arginine decarboxylase); 2) B. cadaveris (lysine decarboxylase); 3) Micrococcus sp.n. (histidine decarboxylase); 4) Cl. Welchii SR 12 (glutamine decarboxylase); 5) S. faecalis (tyrosine decarboxylase); and 6) Pseudomycobacterium sp.n. (aspartico decarboxylase) (Ref 3).

Card 1/2

SOV/20-59-124-2-60/71

The Effect of Penicillin Amine Upon Decarboxylation of Amino Acids by Microbial Preparations

DL-penicillin amine was added in concentrations of 10^{-2}, 10^{-3}, and 10^{-4} mol/liter. An M/60 solution of the amino acid was then added to the enzymatic preparation in the buffer solution, and the rate of decarboxylation was determined in the Warburg apparatus. Table 1 shows the effect of penicillin amine on the decarboxylation of lysine of B. cadaveris. A concentration of 10^{-2} mol/liter considerably hampers this process, while this effect is weak at 10^{-4} mol/liter. The same suppressing effect can be clearly observed in arginine decarboxylase (E.coli). Snell and his co-workers (Refs 2,4) maintain that several phosphopyridoxal ferments need metal ions for a complete activation. In order to check that statement the effect of Al^{3+}, Zn^{2+}, Fe^{3+}, and Cu^{2+} was investigated in the above process of E.coli. The results are summarized in tables 3 and 4. They show that the addition of Al, Fe, Cu or Zn ions does not eliminate the suppression of decarboxylase reaction by penicillin amine.- There are 4 tables and 5 references, 1 of which is Soviet.

1st Moscow Med. Inst. im I. M. Sechenov

Card 2/2

MARDASHEV, S.R.; LU ZHU-SHAN [Lu Ju-shang]; ROMAKOV, Yu.A.

Synthesis of acetylaspartic acid. Mikrobiologiia 28 no.5:641-646 S-O '59. (MIRA 13:2)

1. 1-y Moskovskiy ordena Lenina meditsinskiy institut im. I.M. Sechenova.
(ASPARTIC ACID rel.cpds.)
(CLOSTRIDIUM metab.)

OREKHOVICH, V.N., prof.; MARDASHEV, S.R., prof.; DEBOV, S.S., kand.med.nauk

Soviet biochemists visit the U.S.A. Vest.AMN SSSR 14 no.7: 57-67 '59. (MIRA 12:9)

1. Deystvitel'nyye chleny AMN SSSR (for Orekhovich, Debov).
(UNITED STATES--BIOCHEMISTRY)

MARDASHEV S.R

OREKHOVICH, V.N.; BYCHKOV, S.M.; DEBOV, S.S.; MARDASHEV, S.R.; SEVERIN, S.Ye.

Second International Congress on Clinical Chemistry. Vest.AMN SSSR 13 no.2:62-74 '58. (MIRA 11:3)
(CHEMISTRY, MEDICAL AND PHARMACEUTICAL)

MARDASHEV, S.R.; LU ZHU-SHAN [Lu Ju-shang]

Microbial amino acid α -amidases [with summary in English].
Biokhimiia 22 no.1/2:369-374 Ja-F '57. (MLRA 10:7)

1. Kafedra biologicheskoy khimii 1-go Moskovskogo meditsinskogo instituta im. I.M.Sechenova.

(CLOSTRIDIUM,
cadaveris, amino acid α -amidase (Rus))
(MICROCOCCUS, metabolism,
amino acid α -amidase (Rus))
(AMIDASES,
amino acid α -amidase in Clostridium cadaveris & Micrococcus (Rus))

MARDASHEV, S.R.

SEVERIN, S.Ye.; MARDASHEV, S.R.; BUCHKOV, S.M.; DEBOV, S.S.

International Congress on Clinical Chemistry. Vop.med.khim. 3 no.5: 397-400 S-O '57. (MIRA 10:12)
(CHEMISTRY, MEDICAL AND PHARMACEUTICAL)

LESTROVAYA, N.N.; MARDASHEV, S.R.

Synthesis of phenylalanine and tyrosine peptides by chymotrypsine.
Vop.med.khim. 2 no.4:294-298 Jl-Ag '56. (MLRA 9:10)

1. Kafedra biokhimii I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova.

(PROTEASES,
chymotrypsin, eff. on peptides & tyrosine synthesis in vitro (Rus))
(PEPTIDES,
synthesis in vitro, eff. of chymotrypsin (Rus))
(TYROSINE,
same)

MARDASHEV, S. R.

USSR/ Medicine - Biochemistry

Card 1/1 Pub. 22 - 36/51

Authors : Mardashev, S. R., and Pavlova, N. A.

Title : Reamination of purine compounds with glyoxylic and glycolic acids

Periodical : Dok. AN SSSR 101/1, 135-136, Mar 1, 1955

Abstract : The biosynthesis of glycocoll obtained from glyoxylic and glycolic acids and aminopurine derivatives was investigated to determine whether and what role purine compounds play in the reamination reaction in the animal organism. The experiments were carried out on white rats and the results obtained are tabulated. Seven references: 2 USSR and 5 USA (1945-1954). Table.

Institution : The First Medical Institute, Moscow

Presented by : Academician A. D. Speranskiy, July 19, 1954

MARDASHEV, S. R.

Amino acid amides, their exchange and physiological role in the animal organism. S. R. Mardashev. *Uspekhi Sovremennoi Biol.* 40, No. 1, 8-30(1955).—A thorough review with 76 references covering the following general topics: (1) Asparagine and glutamine content of products of animal origin; (2) biol. synthesis; (3) enzymic deamidation of amides; (4) formation and excretion of NH_3; (5) participation of amides in transamination; (6) utilization of amides in biosynthesis of other substances; (7) amides and synthesis of peptide bonds; (8) exchange of amides and pathology. J. A. Stekol

MARDASHEV, S. R.

Synthesis of glutamine in heart muscles. S. R. Mardashev and V. F. Markelova (1st Moscow Med. Inst.). *Ukrain. Biokhim. Zhur.* 27, 348-54(1955)(in Russian).—Male rabbits were decapitated and their hearts removed and stored in ice. The pericardial tissue and large blood vessels were removed, the residue cut into small pieces, macerated in a phosphate buffer of pH 7.4 at 0°, and homogenized for 4 min. in a Waring Blendor. The final homogenate contained not less than 300 mg. of crude muscle tissue per ml. The sarcosomes synthesized glutamine by the process of glutamic acid amidization. The addn. of adenosine triphosphate to the isolated sarcosomes raised the glutamine synthesizing activity to a degree equal to that of the original homogenate. The nuclear fraction and supernatant fluid were free from the enzymic system synthesizing glutamine.

B. S. Levine

PLEKHAN,M.I.; MARDASHEV,S.R.; KULAKOVSKAYA

Certain N-derivatives of amino acids and of peptides. Zhur.ob. khim. 25 no.2:371-374 F '55. (MLRA 8:6)

1. 1-y Moskovskiy meditsinskiy institut.
(Amino acids) (Peptides)

MARDASHEV, S. R.,
USSR/Medicine - Boris Il'ich Zbarskiy FD-1778

Card 1/1 Pub 122-9/9

Author : Mardashev, S. R., Cor Memb Acad Med Sci USSR

Title : Boris Il'ich Zbarskiy

Periodical : Vest. AMN SSSR, 1, 62-63, Jan/Mar 1955

Abstract : Boris Il'ich Zbarskiy, Soviet biochemist, died suddenly on October 7, 1954 at the age of 70. He was an active member of the AMS USSR and a member of the CPSU. He was recipient of many awards. He was an excellent teacher and taught biochemistry in the 1st pedagogical institute of NARKOMPROS and in 1st and in 2nd Moscow medical institutes. His name is associated with founding of the physico-chemical institute imeni Karpov and of the biochemical institute of NARKOMZDRAV. He was the founder and the first head of the institute of nutrition. B. I. Zbarskiy was born in 1885 in Kamenets-Podol'sk where he received his secondary education. He received his chemical training in University of Geneva and passed a qualifying examination at the University of Peterburg. Together with V. P. Vorob'yev he embalmed Lenin's body in 1924.

Institution: --

Submitted : --

MARDASHEV, S.R.

The interaction of glyoxal with proteins. S. R. Mardashev and M. I. Pleshan. *Biokhimiya* 12, 57[illegible] (1947). The interaction between the proteins of rabbit muscle and glyoxal results in the formation of color groupings and colorless compds. which contain free aldehyde groups. Muscle proteins so treated become more resistant to the action of pepsin than after treatment with HCHO. B. S. Levine

MARDASHEV S.R.

ZBARSKIY, B.I.; IVANOV, I.I.; MARDASHEV, S.R.; KAPLANSKIY, S.Ya., redaktor; BOBROVA, Ye.N., tekhnicheskiy redaktor.

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

GLADKOVA, V.N.; MARDASHEV, S.R.; SEMINA, L.A.

New microorganism containing decarboxylase of *l*-histidine. Mikrobiologiia, Moskva 22 no.2:141-144 Mar-Apr 1953. (CLML 25:4)

1. First Moscow Order of Lenin Medical Institute.

MARDASHEV, S.R.

1

USSR

7 Reaction of glyoxal with amino acids. M. I. Plekhan and S. R. Mardashev (Sci. Research Lab., Ministry of Health, Moscow). *Zhurnik Statei Obshchei Khim.* 2, 1545–53(1953). —Glyoxal (I) reacts with mono-amino acids through but 1 CHO group and 1 NH_2 group. The reaction occurs in 2 steps through formation of a colorless compound of type $HO_2CCHRN{:}CHCHO$ (II), which then passes into the colored cyclic product $HO_2CCRN{:}CHCH(OH)$ (III), which is stable. The colorless intermediate is destroyed by NH_2OH, *p*-phenylenediamine, semicarbazide, with formation of the corresponding I deriv. and liberation of the amino acid. Reaction of 30% aq. I with amino acids proceed best in aq. medium with excess I at about 0°. To 2 g. $H_2NCH_2CO_2H$ in 2 ml. H_2O was added with ice cooling 3 ml. 38% aq. I (neutralized to pH 6 with $CaCO_3$ or Na_2CO_3) and after 45 min. the soln. was treated with 50–70 ml. abs. MeOH and 30–40 ml. abs. Et_2O, yielding 70% II; this was taken up in H_2O, treated with $(CO_2H)_2$ to remove the admixed Ca salt of an org. acid contaminant present in com. I, filtered and again pptd. with Et_2O-MeOH. II (R = H), thus obtained is washed with abs. Me_2CO and Et_2O and dried *in vacuo*. To 0.5 g. glycine Cu salt in 6 ml. H_2O was added with cooling 4 ml. 38% I (neutralized as above), cooled 1 hr. longer, then kept 3.5 hrs. at room temp., then treated with MeOH-Et_2O yielding light blue ppt. of the Cu deriv., $C_4H_4O_4N_2Cu \cdot 3H_2O$. Heating the aq. soln. of II (R = H) on a steam bath until CHO test is neg. gave after addn. of MeOH-Et_2O a ppt. of III (R = H), isolated as a monohydrate. II (R = Me) prepd. similarly from alanine, isolated as hemihydrate. Heating aq. solns. of II in acid or basic conditions results in formation of III, which was followed spectrophotometrically; the curves of reaction progress are shown. Electrolytic reduction of III resulted in no reduction at the cathode (no color loss) while at the anode the product was oxidized to $H_2NCH_2CO_2H$ and $HCOCO_2H$.

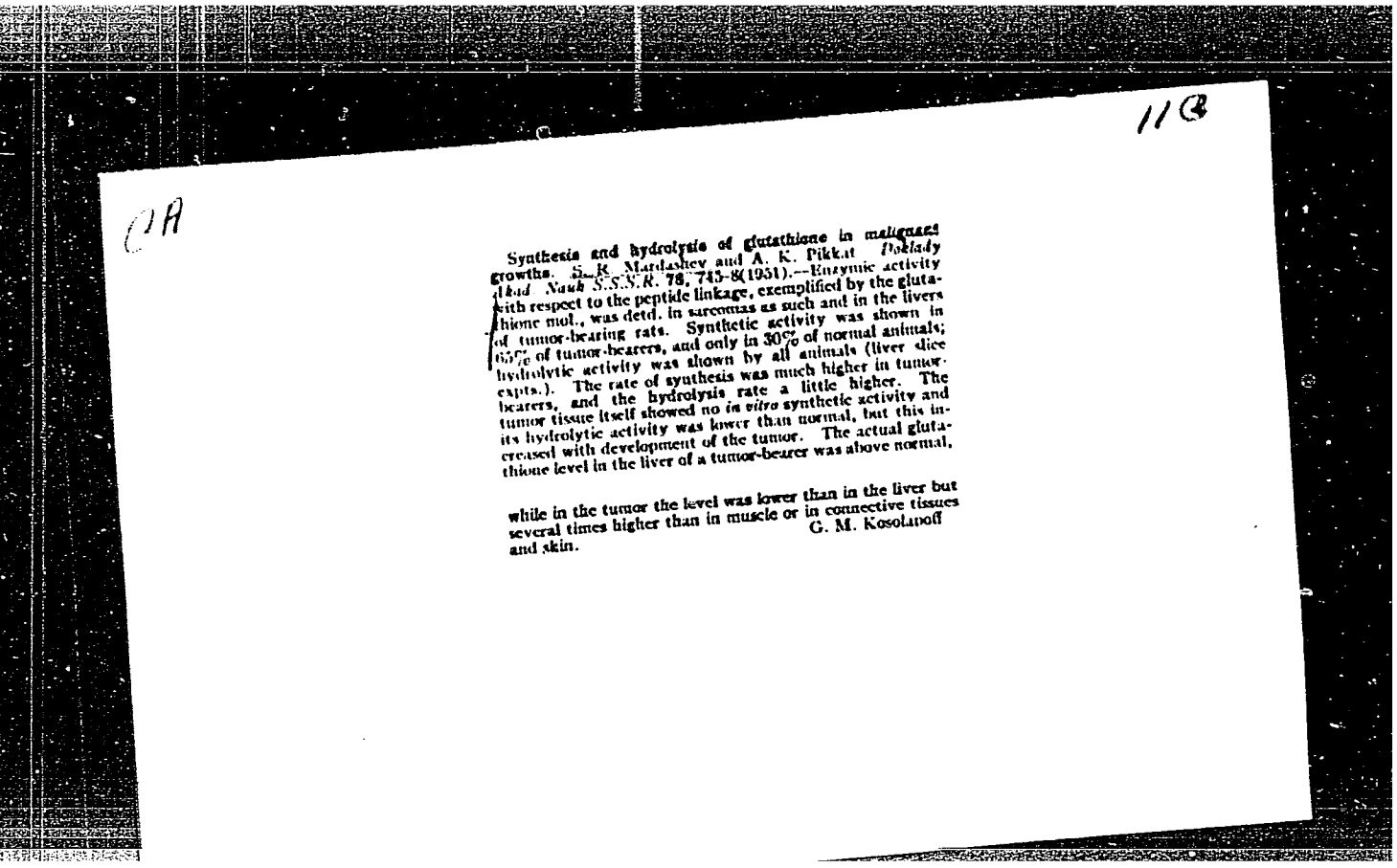
G. M. Kosolapoff

MARDASHEV, S.R.; KULAKOVSKAYA, N.A.

Codecarboxylase of the aspertic acid. Vop.med.khim. 4:231-236 '52. (MIRA 11:4)

1. Kafedra biokhimii I Moskovskogo ordena Lenina meditsinskogo instituta.

(CODECARBOXYLAZE) (ASPARTIC ACID)



11 C

CA

Synthesis and hydrolysis of glutathione in malignant growths. S. R. Mardashev and A. K. Pikkat. *Doklady Akad. Nauk S.S.S.R.* 78, 745-8(1951).—Enzymic activity with respect to the peptide linkage, exemplified by the glutathione mol., was detd. in sarcomas as such and in the livers of tumor-bearing rats. Synthetic activity was shown in 65% of tumor-bearers, and only in 30% of normal animals; hydrolytic activity was shown by all animals (liver slice expts.). The rate of synthesis was much higher in tumor-bearers, and the hydrolysis rate a little higher. The tumor tissue itself showed no *in vitro* synthetic activity and its hydrolytic activity was lower than normal, but this increased with development of the tumor. The actual glutathione level in the liver of a tumor-bearer was above normal, while in the tumor the level was lower than in the liver but several times higher than in muscle or in connective tissues and skin.

G. M. Kosolapoff

MARDASHEV, S. P.

USSR/Chemistry (Biological) - Transamidation 21 May 51

"Biological Synthesis of Asparagine and Glutamine by Transamidation," S. P. Mardashev, N. N. Lestrovaya

"Dok Ak Nauk SSSR" Vol LXXVIII, No 3, pp 547-550

Showed in expts with rat liver sections that glutamine is synthesized from glutamic acid and asparagine (both at alkaline and acidic reactions) and that asparagine is synthesized from aspartic acid and glutamine (at acidic reaction only).

186T16

MARDASHEV, S.R.

Effect of some polypeptides on the sugar contents of blood. Vop.med. khim. 3:263-274 '51. (MIRA 11:4)

1. Kafedra biokhimii 1-go Moskovskogo ordena Lenina meditsinskogo instituta.

(BLOOD SUGAR) (PEPTIDES)

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

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

CA

11A

Enzymic synthesis of glycine from glyoxalic acid. S. R. Mardashev and L. A. Semina. *Doklady Akad. Nauk S.S.S.R.* 74, 537–40(1950).—Incubation of rat-liver specimens 1 hr. at 30° in O_2 or N_2 with solns. of glyoxalic acid with addn. of either asparagine, aspartic acid, NH_4Cl, glutamine, or glutamic acid in phosphate buffers (pH 6 or 8), followed by partition chromatography of the products showed the synthesis of glycine from glyoxalic acid, which proceeds at pH 6 or 8 both in aerobic and anaerobic conditions. Since addn. of NH_4 salts does not increase the rate, the reaction is not simply a reversed deamination of glycine. The order of effectiveness in the synthesis is given by the ascending series: aspartic acid, glutamic acid, asparagine, glutamine. Direct transamination is a possible course, and possibly 2 enzymes participate, causing condensation of the amido group with carbonyl of glyoxalic acid, followed by reduction and hydrolysis into glycine and aminodicarboxylic acid.

G. M. Kosolapoff

CA

11 B

Preparative isolation of crystalline asparagine from liver. S. R. Mardashev and L. A. Semina. *Doklady Akad. Nauk S.S.S.R.* 73, 351-4(1950).—Cattle liver (3 kg.) macerated in H_2O at room temp., freed of protein by 20% Cl_3CCO_2H, filtered (total vol. 8 l.), extd. with Et_2O to remove the reagent from aq. filtrate, concd. *in vacuo* at 40°, centrifuged, cooled to 0° and acidified with 5% H_2SO_4, followed by phosphotungstic acid in 5% H_2SO_4, centrifuged, freed of phosphotungstate ion excess by $Ba(OH)_2$, freed of Ba by H_2SO_4, concd. at 40° to 400 ml., made alk. with $Ba(OH)_2$ and dild. with 3 vols. 96% EtOH to remove free dicarboxylic amino acids, retreated with H_2SO_4, concd. to 300 ml. and slowly ppted. by 25% $Hg(OAc)_2$, gave a ppt. (isolated in 2 fractions) which, treated with H_2S, neutralized with NH_4 and concd. at 40°, gave some tyrosine (removed by filtration); continued cooling yielded some leucine, and the final concentrate brought down to 3 ml. and treated with 4 ml. 96% EtOH and chilled, yielded after 24 hrs. a dense mass of asparagine in 7 mg. yield; the identity was checked by microscopic examn. and chromatography; analysis indicated the monohydrate, m. 228–30°. The results confirm the presence of asparagine in living matter. G. M. Kosolapoff

AIII - 25

B.A.

Content of amino-acids in proteins of decarboxylating bacteria. S. E. Mardashev, R. H. Etingof, and N. A. Kulakovskaya (*Mikrobiologia*, 1950, **19**, 211—216).—Lysine, arginine, histidine, glutamic, and aspartic acids were estimated in *B. cadaveris*, *Escherichia coli*, and species of *Pseudobacterium* and *Clostridium*. Lysine is present in greater amount in the anaërobic than the aërobic organisms. The total % of dicarboxylic amino-acids is fairly constant for all species examined, in spite of the fact that amounts of individual amino-acids vary considerably. The amino-acid constitution does not appear to be related to the capacity to decarboxylate particular amino-acids, nor is it affected by different culture conditions. D. H. SMYTH.

Dept. Biochem., 1st Moscow Order Lenin Med. Inst.

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New method for the quantitative determination of amino dicarboxylic acids and their amides. S. R. Mardashev and V. V. Mamaeva (First Moscow Med. Inst.). *Biokhimiya* **15**, 465-72(1950).—The amino dicarboxylic acids (aspartic and glutamic acids) were sepd. from their amides (asparagine, glutamine) by adsorption on Al(OH)$_3$ that had been treated with HCl (T. Wieland, *C.A.* **37**, 6301[4]). Aspartic acid and asparagine were detd. enzymically with bacterial aspartic acid decarboxylase (*C.A.* **43**, 3061*c*), and glutamic acid and glutamine with bacterial glutamic acid decarboxylase (*C.A.* **43**, 3065*d*). The same soln. and the same vessel in the Warburg app. were used, first, for the detn. of asparagine, and then for glutamine. Aspartic and glutamic acids were detd. in different vessels. The manometrical was employed for the detn. of these acids and their amides in protein hydrolyzates and in animal tissues. Thus, rabbit liver contained (in mg. %) asparagine 3.6, glutamine 50.6, aspartic acid 21.2, and glutamic acid 52.1. The corresponding values for rabbit kidney were 7.3, 21.7, 16.1, and 75.5, resp.

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