"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEL', L. N.

USSR/Biology - Biochemistry

Card : 1/1

Authors : Vladimirov, G. E., and Rubel', L. N.

Title : Rate of restoration of adenosintriphosphoric acid and phosphocreatine in the cerebrum of rats

Periodical : Dokl. AN SSSR, 96, Ed. 5, 1021 - 1024, June 1954

Abstract : Experiments were conducted to determine the rate of restoration of ATF (adenosintriphosphoric acid) and phosphocreatine in the blood and tissues of the cerebrum of living rats. Results obtained indicate a somewhat slow metabolism of labile phosphate groups in ATF and phosphocreatine. The activity of ATF analytically revealed in the cerebrum tissue is 2697 · 14.0 = 37758. The activity of ATF relative to the blood presence in the brain tissues (based on a blood content of 6.4%) is 55330 · 3.1 · ·0.064 = 10977. The ATF activity in the brain tissue free of blood is x(14.0 - 3.1 · 0.064) · 0.936 = 12.92 x. Sixteen references. Tables, graphs.

Institution : Acad. of Sc. USSR, The I.P. Pavlov Physiological Institute
Presented by : Academician, K. M. Bykov, April 16, 1954

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

VLADIMIROV, G.Ye.; IVANOVA, T.N.; RUBEL', L.N.

Rate of phosphorus restoration in brain phospholipids in rats during rest and vollowing excitation of the central nervous system. Trudy Inst.fiziol. 5:409-415 '56. (MIRA 10:1)

1. Laboratoriya biokhimii nervnoy sistemy. Zaveduyushchiy - G.Ye. Vladimirov.
(PHOSPHORUS IN THE BODY) (BRAIN)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEL', L.N.

Neural regulation of the content of residual nitrogen in blood. Fiziol. zhur. 42 no.2:216-220 F '56. (MLRA 9:6)

1. Laboratoriya biokhimii nervnoy sistemy Instituta fiziologii imeni I.P. Pavlova AN SSSR i Laboratoriya fiziologii gazoobmena i teploobmena IEM AMN SSSR, Leningrad.

(BLOOD,
nitrogen, neural regulation in dogs (Rus))
(NITROGEN, in blood,
neural regulation in dogs (Rus))
(NERVOUS SYSTEM, physiology,
regulation of blood nitrogen in dogs (Rus))

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

VLADIMIROV, G.Ye.; IVANOVA, T.N.; PRAVDINA, N.I.; RUBEL', L.N.

The rate of turnover of cerebral phosphorus compounds in the brain in profound hypothermia. Biokhimiia 24 no.5:891-898 S-O '59. (MIRA 13:2)

1. Laboratoriya biokhimii nervnoy sistemy Instituta fiziologii imeni I.P. Pavlova AN SSSR.

(BRAIN metab.)
(PHOSPHATES metab.)
(HYPOTHERMIA INDUCED eff.)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

KANFOR, I.S.; RUBEL', L.N.

Complex reflex effect of the act of eating on the lactic acid content of the blood. Fiziol.zhur. 45 no.4:471-475 Ap '59. (MIRA 12:6)

1. From the laboratory of respiratory and heat exchange, department of general physiology, Institute of Experimental Medicine, Leningrad.

(FOOD,
eating, eff. on blood lactic acid (Rus))
(LACTIC ACID, in blood,
eff. of eating (Rus))

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEL L.N., VLADIMIROV, G. Ye., IVANOVA T.N., PRAVDINA, N.I. (USSR)

"Certain Aspects of Phosphorus Metabolism in the Rat Brain in Conditions of Hyperthermia."

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

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

IVANOVA, T.N.; PRAVDINA, N.I.; RUBEL', L.N.

Free nucleotides in the brain tissue and the renewal rate of their phosphate groups. Biokhimiia 27 no.2:293-304 Mr-Ap '62. (MIRA 15:8)

1. Laboratory of Biochemistry of the Nervous System, Physiological Institute, Academy of Sciences of the U.S.S.R., Leningrad.
(NUCLEOTIDES) (PHOSPHORUS METABOLISM) (BRAIN)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUDEL', L.N.; IVANOVA, T.N.

Phosphate metabolism of plasmalogenic phospholipides in the brain tissue. Dokl. AN SSSR 165 no.4:943-946 D '65. (MIRA 18:12)

1. Institut fiziologii im. I.P.Pavlova AN SSSR. Submitted January 29, 1965.

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

IVANOVA, T.N.; PRAVDINA, N.I.; RUHEL', L.N.

Determination of phosphatidylethanolamine and phosphatidylcholine phosphate metabolism in various parts of the rat brain. Biokhimiia 30 no.2:216-225 Mr-Ap '65. (MIRA 18:7)

1. Laboratoriya funktsional'noy biokhimii nervnoy sistemy Instituta fiziologii imeni Pavlova AN SSSR, Leningrad.

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEL, Louis, ing.; MATCAU, Alex., ing.

A new member in the Moskvici family. St si Teh Buc 16 no.12:42 D '64.

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEL, Louis, ing.

The motor of tomorrow; rotative or alternative. St si Teh Buc 14 no.11:24-25, 45 N'62.

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

L 24165-66 EWT(1)/T JK

ACC NR: AP6015166 SOURCE CODE: UR/0218/65/030/002/0216/0225

AUTHOR: Ivanova, T. N.; Pravdina, N. I.; Rubel', L. N.—Rubel, L. N. 36 B

ORG: Laboratory of Functional Biochemistry of the Nervous System, Institute of Physiology im. I. P. Pavlov, Leningrad (Laboratoriya funktsional'noy biokhimii nervnoy sistemy Instituta fiziologii AN SSSR)

TITLE: Determining the rate of metabolism of the phosphate of phosphatidylethanolamine and phosphatidylcholine in different regions of the brain of the rat

SOURCE: Biokhimiya, v. 30, no. 2, 1965, 216-225

TOPIC TAGS: rat, brain, biologic metabolism, organic phosphorus compound

ABSTRACT: Phospholipids account for nearly one-half of the total mass of lipids of the brain. The energetic aspect of the phosphate metabolism of individual phospholipid fractions still has not been elucidated, however. Accordingly, the authors investigated this aspect for two fractions—phosphatidylcholine and phosphatidylethanolamine. A solution of radioactive phosphorus $Na_2HP^{32}O_4$ was subcutaneously administered to adult white rats weighing 180-200 g, which were killed 2 to 8 hr afterward. Their heads were cut off following desanguination of the brain by perfusion and immersion in liquid oxygen. The subsequently extracted pieces of the brain were ground in a 10-fold volume of prefrozen 10% trichloroacetic acid and further processed to isolate the lipid extract and hydrolyze phosphatidylcholine (PCh) and phosphatidylethanolamine (PEA). The proportional metabolic rate (R) was determined through experiments with the administration of different doses of P^{32} (2.5 and 1.7 μcurie/g body weight) with subsequent analysis of the cerebral cortex, medulla oblongata, and spinal cord. Curves

UDC: 577.153.3

Card 1/2

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

L 24165-66

ACC NR: AP6015166

of specific activity as a function of time for the phosphate of both reaction products (PCh and PEA) and the phosphate of the precursor (ATP) were used to calculate the proportional metabolic rate (R), the turnover time (t_t), and the absolute metabolic rate (AMR); the findings do not differ significantly for the cerebral cortex, the medulla oblongata, and the spinal cord. The AMR for the phosphate groups of PCh in all the brain parts investigated is higher (0.1 μmole/hr/g tissue) than for the phosphate of the total PEA fraction (0.07 μmole/hr/g tissue). Orig. art. has: 2 figures, 3 formulas and 3 tables. [JPRS]

SUB CODE: 06 / SUBM DATE: 24Feb64 / ORIG REF: 014 / OTH REF: 014

Card 2/2

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

L 41072-66 EWT(m)/T WE

ACC NR: AP6018622 (A) SOURCE CODE: UR/0065/66/000/006/0040/0043

AUTHOR: Rubekin, N. F.

ORG: LF SKB ANN

26
B

TITLE: The selection of optimal operating conditions for a catalytic reforming unit

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 6, 1966, 40-43

TOPIC TAGS: optimal control, industrial production, catalytic reforming, cost estimate

ABSTRACT: The author describes mathematical models for optimizing a typical reforming unit. The models were developed in order to derive and compare conditions of optimization for maximum profit per time, and optimization for minimum cost of gasoline produced. The operating efficiency of the reactor, the duration of the operating cycle and deactivization of alumina-supported Pt catalysts, and the octane number of gasolines produced are considered. Optimization for maximum profit was shown to require more difficult operating conditions, whereas optimization for minimum cost of gasolines of specified quality involves milder reactor conditions, permitting longer cycles without regeneration of catalysts. Maximum profit is considered a more expedient goal of optimization since the operation of plants or equipment units should be in most cases evaluated by this factor. Orig. art. has: 3 tables and 7 formulas.

SUB CODE: 13, 05/ SUBM DATE: none/ ORIG REF: 003/ OTH REF: 001

Card 1/1 UDC: 665.531

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEL', M.[Rubel, M.]

Use of sequential tests in determining fossil brachiopods. Izv. AN Est. SSR. Ser. fiz.-mat. i tekh. nauk 12 no.3:327-333 '63. (MIRA 16:11)

1. Academy of Sciences of the Estonian S.S.R., Institute of Geology.

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEL, M.P.; SPITSYN, Vikt.I.

Study of the products of the reaction between trisubstituted sodium phosphomolybdate and sodium hydroxide. Zhur. neorg. khim. 5 no. 12:2770-2773 D '60. (MIRA 13:12)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova Kafedra neorganicheskoy khimii.
(Sodium phosphomolybdate) (Sodium hydroxide)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

SPITSYN, Vikt.I.; RUBEL, M.P.

Study of trisubstituted guanidine phosphomolybdate and of the products from its reaction with guanidine carbonate. Zhur. neorg. khim. 5 no. 12:2774-2780 D '60. (MIRA 13:12)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova Kafedra neorganicheskoy khimii.
(Guanidine)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEL, M. P., Cand of Chem Sci — (diss) "On the Question of the Highly Displaceable Layers of Heteropoly Acids," Moscow, 1959, 8 pp (Moscow State Univ im Lomonosov, Chair of Inorganic Chemistry) (KL, 4-60, 115)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

68224

~~5(2)~~ 5.2620

S/078/60/005/02/010/045
B004/B016

AUTHORS: Spitsyn, Vikt. I., Rubel, M. P.

TITLE: On the Molybdates of Guanidine

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol 5, Nr 2, pp 292-296 (USSR)

ABSTRACT: To investigate the interaction between the guanidine salt of phosphomolybdic acid and guanidine carbonate, the authors produced the various molybdates of guanidine. They describe the preparation of normal guanidine molybdate $(CN_3H_6)_2MoO_4$ (Table 1: analyses, Table 2: lines of the Debye powder pattern). The aqueous solution of this compound has pH = 7 (measured by means of LP-5 type potentiometer). The paramolybdate was obtained from the normal guanidine molybdate by a) addition of 0.1 N HCl, b) exchange reaction between sodium permolybdate and guanidine nitrate: $10CN_3H_5 \cdot 12MoO_3 \cdot 8H_2O$ (Table 3: analysis; Table 4: solubility in the presence of guanidine nitrate, Table 5: lines of the Debye powder pattern). A comparison of the Debye powder patterns of the normal and the paramolybdate (Fig 1) shows that

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68224

On the Molybdates of Guanidine

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B004/B016

these compounds have a different crystal structure. The guanidine metamolybdate $2CN_3H_5 \cdot 4MoO_3 \cdot 1.5H_2O$ was obtained in the form of an amorphous powder a) by reaction of sodium metamolybdate with guanidine nitrate, b) by acidifying the solution of the normal guanidine molybdate with 5.5 N HCl (Table 6: analysis; Table 7: solubility in guanidine nitrate). It may be seen from figure 2 that the solubility of guanidine metamolybdate decreases more rapidly than the solubility of guanidine paramolybdate with increasing concentration of guanidine nitrate. There are 2 figures, 7 tables, and 3 references.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova Kafedra neorganicheskoy khimii (Moscow State University imeni M. V. Lomonosov, Chair of Inorganic Chemistry)

SUBMITTED: February 9, 1959

Card 2/2

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEL, N. N.; TIKHONOVA, V. I.; SOFRONOV, B. N.; PETROPAVLOVSKAYA, N. A.; SMIRNOVA, A. M.; ZALESSKAYA, V. V.; FILATOVA, Z. V.

"Special features of the microgiological immuno-epidemiological characteristics of scarlet fever treated with penicillin."

Report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists and Infectionists. 1959

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEL', N.N.

RUBEL', N.N.

Materials on quantitative evaluation of general immunological reactions. Trudy Len.inst.epid. i mikrobiol. 9:5-32 '47. (MIRA 10:9)

1. Iz otdela detskikh infektsiy Instituta im. Pastera (nauchnyy rukovoditel' V.I.Ioffe)
(IMMUNITY)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

IOFFE, V.I.; RUBEL', N.N.

Some problems in the study of infectious and epidemic processes. Trudy Len. inst. epid. i microbiol. 18:37-53'58. (MIRA 16:7)

1. Iz laboratorii detskikh kapel'nykh infektsiy Leningradskogo intituta epidemiologii, mikrobiologii i gigiyeny imeni Pastera.
(IMMUNOLOGY)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEL', N.N.;IOFFE, V.I.

Some of the main problems in an experimental study of streptococcal infection and the results of investigations. Trudy Len. inst. epid. i microbiol. 18:54-66'58. (MIRA 16:7)

1. Iz laboratorii detskikh kapel'nukh infektsiy Leningradskogo instituta epidemiologii, mikrobiologii i gigiyeny imeni Pastera i iz otdela mikrobiologii Instituta eksperimental'noy meditsiny AMN SSSR.

(STREPTACOCCAL INFECTIONS)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEL', R. B.

15-1957-1-38

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 1, p 7 (USSR)

AUTHOR: Rubel', R. B.

TITLE: Experiences Gained During the Geological Excursions in the Urals (Iz opyta geologicheskikh ekskursiy po Uralu)

PERIODICAL: Uch. Zap. Sverdl. gos. ped. in-ta, 195-, Nr 12, pp 144-162

ABSTRACT: The article describes the methods of conducting geological excursions for the students of the department of geology.

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

KARELIN, V.G.; RUBEL', R.B.

Caves of Nizhniye Sergi District, Sverdlovsk Province. Okhr. prir. na Urale no.1:149-155 '60. (MIRA 14:4)
(Nizhniye Sergi District—Caves)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEL', Raisa Borisovna, geolog, prepodavatel; KATKOVA, N., red.

[In mountains and caves] V gorakh i peshcherakh. Sverdlovsk, Sverdlovskoe knizhnoe izd-vo, 1963. 145 p.
(MIRA 17:7)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

KARELIN, V.G.; RUBEL', R.B.

Work of the Section of Speleologists. Okhr. prir. na Urale no.1: 179 '60. (MIRA 14:4)
(Sverdlovsk Province--Speleology)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEL, R.B.

RUBEL, R.B.; NOVOSPASSKIY, V.V., redaktor; RAKOV, S.I., tekhnicheskiy redaktor.

[Through the southern Urals] Po iuzhnomu Uralu. [Moskva, Izd-vo VTsSPS Profizdat, 1954, unpaged]. (MLRA 8:4)
(Ural Mountain region--Description and travel)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEL', R. B.

Po Uralu (Through the Urals) Turistskiye Marshruty. Moskva, Profizdat, 1953. 176 P. Illus., Maps. Bibliography: P. 173-(174)

So: 9N/5
621.121
.R8

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEL', Raisa Borisovna; MASLENNIKOV, Yevgeniy Polikarpovich; KATKOVA, N., red.; SAKHYN', Yu., khudozh.-tekhn.red.

[Through the Central Urals] Po srednemu Uralu. Sverdlovsk, Sverdlovskoe knizhnoe izd-vo, 1959. 236 p. (MIRA 13:3)
(Ural Mountain region--Description and travel)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

Rubel S.

3814

546.72.04 : 545.81 : 546.47

Kemula W., Hulanicki A., Rubel S. Colorimetric Determination of Iron in Zinc.

CH

„Kolorymetryczne oznaczanie żelaza w cynku". Przemysł Chemiczny No. 2, 1955, pp. 99-102, 5 tabs

A colorimetric method for the determination of iron in zinc. Reaction with thio-glycolic acid in quantities of 0.005 to 0.5 mg, which correspond to Fe concentrations of 0.001 to 0.1 per cent in the instance of 0.5 g samples of zinc, constituted the basis for this method. The iron was separated from zinc by simultaneously precipitating iron hydroxide together with the carrier magnesium hydroxide by a surplus of concentrated NaOH. A detailed examination was made of the influence of the amount of the reagent and the time allowed for colorimetric measurements as well as of the applicability of Beer's law. To determine optimum conditions for the separation of iron, the influence exerted by the amount of the carrier, the heating of the solution and washing of the sediment were investigated. The total standard error of determination is 1.14 per cent, the greatest error occurring during the chemical treatment leading to the separation of the surplus zinc.

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEL, Stanislaw

POLAND

KEMULA, Wiktor, prof. dr; RUBEL, Stanislaw, dr.

Department of Inorganic Chemistry (Katedra Chemii Nieorganicznej), University, Warsaw - (for both).

Warsaw, Chemia analityczna, No 6, November-December 1965, pp 1333-1345.

"Analysis of aluminum alloys. Part 1: The polarographic determination of copper and iron."

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

SPITSYN, Vikt. I.; RUBEL, M.P.

Guanidine molybdates. Zhur.neorg.khim. 5 no.2:292-296 F '60. (MIRA 13:6)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova Kafedra neorganicheskoy khimii.
(Guanidine)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEL, S.; KEMULA, W.

Polarographic determination of lead and iron in perhydrol and of copper, lead, and iron in hydrofluoric acid and in ammonium fluoride. p. 837.

CHEMIA ANALITYCZNA. (Komisja Analityczma Polskiej Akademii Nauk i Naczelna Organizacja Techniczna) Warszawa, Poland. Vol. 3, No. 5/6, 1958.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 8, August 1959
Uncl.

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

KEMULA, Wiktor; RUBEL, Stanislaw; ZAKRZEWSKA, Gabriela

Conditions for the polarographic determination of copper and iron in the presence of large excess of zinc. Chem anal 8 no.1:51-58 '63.

1. Department of Inorganic Chemistry, University, Warsaw.

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

KEMULA, Wiktor; BRAJTER, Krystyna; RUBEL, Stanislaw

Methods of analysis of ferrites. I. Polarographic and complexometric determination of nickel and zinc in manganese-zinc and nickel-zinc ferrites. Chem anal 6 no.3:331-341 '61.

1. Department of Inorganic Chemistry, Uniwersity, Warsaw.

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

S/081/62/000/004/030/087
B149/B101

AUTHORS: Kemula, Wiktor, Brajter, Krystyna, Rubel, Stanisław

TITLE: A method of ferrite analysis. I. The determination of nickel and zinc in mangani-zinc ferrites and nickel-zinc ferrites by polarographic and complexometric methods. II. Complexometric determination of barium in barium ferrites. III. Polarographic determination of manganese and iron

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 4, 1962, 150, abstract 4D145 (Chem. analit." v. 6, no. 3, 1961, 331 - 341, 343 - 346, 346 - 352)

TEXT: I. Complexometric and polarographic methods of determining nickel and zinc in mangani-zinc and nickel-zinc ferrites were worked out. For the complexometric determination of zinc about 200 mg of the ferrite were dissolved in concentrated HCl. In the case of nickel-zinc ferrite F^{2+} was oxidized with concentrated HNO_3, the excess of which was evaporated with added concentrated HCl. The residue was dissolved in 20 ml concentrated

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HCl and the solution passed through an ion-exchange column (diameter 8 mm) packed with anionite levatite MP (layer about 24 cm high, the granules of 0.1 - 0.2 mm size) preliminarily treated with concentrated HCl. Fe, Mn, and Ni were eluted from the column with 120 ml of 1.1 N HCl, then Zn was eluted with 100 ml of 0.01 N HCl. 25 - 50 ml of the eluate were diluted with water up to about 100 ml, to that 2N NaOH was added up to pH~7,2 ml of ammonia buffer solution of pH 10, eriochrome black T (as a mixture with NaCl), and the mixture was titrated with 0.01 M. solution of the complexon III (I), until the color changes from pink to blue. For the determination of Ni, the sample is dissolved in concentrated HCl, Fe^{2+} is oxidized with concentrated HNO_3; after evaporation of the excess of the latter, the solution was further evaporated to approximately 1 ml. To this were added 100 ml of water, 30 ml of 25% solution of tartaric acid, and concentrated NH_4OH to pH 7; then the solution was slightly acidified with acetic acid, warmed to 70°C; 20 ml 1% ethanolic solution of dimethylglyoxime and concentrated NH_4OH with slightly alkaline reaction were added and the solution was kept for 30 min at 70°C. The precipitate of Ni-dimethylglyoximate was filtered, rinsed with water and dissolved in a minimum volume of 2 N

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HCl. To this solution 50 ml of 0.01 M solution of I was added, neutralized with 2 N solution of NaOH to pH 7; then a mixture of eriochrome black T and NaCl was added; 2 ml ammoniacal buffer solution with pH 10 was then added and the excess of I titrated with 0.01 M solution of $ZnSO_4$. For polarographic determination of Zn in manganese-zinc ferrites about 200 mm of the sample were dissolved in 5 ml concentrated HCl and diluted with water to 250 ml. To 3 ml of this solution were added 2.5 ml 1 M NH_4SCN, 1 ml of 1 M solution of sodium tartrate, 0.25 ml 0.5% solution of Tylose; this was diluted with water to 25 ml and after passing of H_2, polarographed from -0.75 to 1.25 v. For polarographic determination of Ni and Zn in nickel-zinc ferrites, about 200 mg of the sample were dissolved in concentrated HCl, diluted with water to 200 ml. To 3 ml of this solution were added 2.5 ml 1 M KSCN, 1 ml 1 M. solution of sodium tartrate, 10 ml water, pH was adjusted to 4 - 5, 0.25 ml 0.5% of Tylose added; the mixture was diluted to 25 ml with water and, after passing of H_2, polarographed from -0.45 to 1.25 v. The error in the determination of Zn and Ni by the complexometric method is about 1.5%, the time required is about 2.5 hours.

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The error in the polarographic method is about 2.5% and the time required about 1.7 hours. II. A method for determination of free Ba in Ba-ferrites was proposed. Barium is precipitated in the form of $BaSO_4$ in the presence of the I which prevents the adsorption of Fe^{3+} by the precipitate $BaSO_4$. The precipitate is dissolved in the alkaline solution of I and excess is titrated with a solution of $MgSO_4$. For the analysis 0.2 g of the sample is dissolved in concentrated HCl, the solution evaporated to dryness, 250ml 0.01 M I added and $BaSO_4$ contained in Ba ferrite filtered off. The precipitate is rinsed with ~50 ml 0.01 M I. The filtrate is heated to boiling and 5 ml 1 N H_2SO_4 is then added (to precipitate the Ba, which enters the ferrite in elemental form) and the mixture is left for 30 min in a boiling water bath. The precipitated $BaSO_4$ is filtered, rinsed with a hot solution of 0.01 M I and finally with water. The filter paper with the precipitate is placed in a beaker, 50 ml 0.01 M I are added, followed by 3 ml of concentrated NH_4OH; the beaker is covered with a watch glass and

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heated until the precipitate is completely dissolved. After this the watch glass is removed and boiling continued until the smell of ammonia has completely ceased. The liquid is diluted with water to 150 ml, 10 ml of ammoniacal buffer solution with pH 10 and eriochrome black T are added and the excess of I, is titrated with 0.01 M $MgSO_4$, until the blue color changes to violet. The mean error of the determination of Ba is ~1.5%; the time of the experiment is about 3 hours. III. For the polarographic determination of Mn and Fe, 0.2 g of the sample is dissolved in 5 ml concentrated HCl with heating, 0.5 ml of a saturated solution of $KClO_3$ is added, and the mixture is heated until the smell of Cl_2 has ceased; then water is added to 250 ml. To 3 ml of the obtained solution 5 ml of 0.5 M triethanolamine are added and the mixture is shaken for 3 min. Then 8 ml of 1 N KOH are added, resulting in a pH of about 13, then the liquid is shaken for 30 sec; after diluting with water to 25 ml, it is placed in the polarographic cell. It is polarographed after passing H_2 for 15 min (the addition of a small amount of Na_2SO_3 may be substituted for the passing of H_2). $E_{1/2}$ for Fe and Mn is -50 and -1.10 v respectively, referred to a saturated calomel electrode. The experimental error is about 2 - 2.5%.

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B149/B101

A method of ferrite analysis. ...

[Abstracter's note: Complete translation.]

Card 6/6

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEL, S.

2D All-Polish Analytic Conference p. 378.

WIADOMOSCI CHEMICZNE. (Polskie Towarzystwo Chemiczne) Wroclaw, Poland. Vol. 12, no. 6, June 1958.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 8, August 1959
UNCL

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Rubel S.

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3815 546.815.04 : 546.48.04 : 546.811.04 : 546.72.04 : 543.81/.822 : 545.33

Kemula W., Hulanicki A., Rubel S. The Determination of Lead-, Cadmium-, Tin-, and Iron-Admixtures in Zinc.

„Oznaczenie domieszek ołowiu, kadmu, cyny i żelaza w cynku" Przemysł Chemiczny No. 2, 1955, pp. 102–106. 4 figs. 2 tabs.

[illegible] admixtures in zinc were determined by spectrographic [illegible] methods. Fe by colorimetric and polarographic methods. The authors reached the conclusion that the spectrographic determination is the most advisable since standard samples are available and make possible an analysis without chemical treatment of samples. Colorimetric determination is convenient and time-saving, particularly in the case of iron. The polarographic method requires the use of fairly large samples as compared to the other quoted methods, in which the concentrations of the admixtures are low. The value of the standard error varies within the range of 5 to 12 per cent, except for the colorimetric determination of iron where the error is 2.21 per cent.

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RUBEL, S.

SCIENCE

Periodicals: CHEMIA ANALITYCZNA. Vol. 3, no. 2, 1958

RUBEL, S. Report on the activities of the Analytic Commission of the Chemical Sciences Committee of the Polish Academy of Sciences in the year 1957. p. 172.

Monthly List of East European Accessions (EEAI) LC Vol. 8, No. 4, April 1959, Unclass.

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEL', S.

Cand Biol Sci - (diss) "Clickbeetles of the Estonian SSR and their significance as pests in agricultural crops." Tartu, 1960. 19 pp; (Tartu State Univ); 150 copies; free; (KL, 6-61 sup, 209)

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

BC

A7-3

Glycolysis activator from normal and tumour tissues. W. M. RUBEL and W. A. BELITZER (Acta Cancrologica, 1935, 1, 317—322).—The glycolytic activity of liver tissue is unaffected by extracts of normal or tumour tissues or by EtOH-insol. material from these. It is increased by EtOH-insol. matter from an aq. NH_3 extract of the dried $COMe_2$-insol. powder prepared by Kraut and Bumm (A., 1928, 1274). Ch. Abs. (p)

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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1ST AND 2ND ORDERS

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11F

Ammonia in the blood isolated from various blood vessels. E. A. Mirer and V. M. Rubel. *J. Physiol. U. S. S. R.* 23, 759-62(in German 762)(1937).—Arterial blood gives practically no NH_3 in 1.5-2 hrs. at 37° in borate buffer at p_H 9.2. Venous blood and blood leaving the brain liberate 0.04-0.27 and 0.1-0.32 mg. %, resp., under the same conditions. It is suggested that the NH_3 is derived not from adenine nucleotides but from other still unknown compds. S. A. Kariala

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The glycolytic capacity of the digestive juice. V. M. Rubel, A. I. Frid and T. B. Solodovnik. *Bull. biol. med. exptl. U. R. S. S.* 8, 366-8(1939) (in English).—The glycolytic power ($Q_{CO_2}^{N_2}$) (I) per g. dry wt. of tissue per hr. of sections of the fundal and pyloric parts of the gastric mucosa is 1.35-6.52 and 5.05-15.9, resp. I is lowest in the esophagus, higher in the stomach and jejunum and highest in the duodenum. Intestinal and pyloric juice thoroughly centrifuged of sediment has no glycolytic activity, but activity appears after the addn. of leucocytes from the blood, lymph or abdominal cavity of a dog with aseptic peritonitis. S. A. Karjala

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1/1

The nitrogen metabolism of the brain. V. M. Rubel. *Bull. biol. méd. expt. U. R. S. S.* 8, 369-72(1939)(in English). — Emotional excitation in dogs is followed by an increased retention by the brain of NH_3-producing substances as indicated by the differences in the NH_3 values of arterial (inflowing) and sinusal (outflowing) blood. The adenylic acid (I) content of sinusal blood generally tends to follow the decreased NH_3 content, but the evidence that I is the source of NH_3 in the blood is not conclusive. The urea and lipoid amino N values of the blood increase during storage under petrolatum at 37° for 22 hrs., so these compds. are apparently not responsible for liberation of NH_3. The addn. of acetylcholine and choline to arterial sinusal and venous blood *in vitro* caused a definite increase in the NH_3 value only in arterial blood. S. A. K.

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The metabolism of the brain and the humorally active substances of the central nervous system. V. M. Rubel, A. I. Frid and A. N. Kislinskii. *J. Physiol.* (U. S. S. R.) 27, 58-69(1939); *Chem. Zentr.* 1940, I, 2497; cf. *C. A.* 34, 5130[1].—Trepanned dogs were subjected to acoustic, alimentary and elec. stimulation, after which the arterial and venous blood (from the sinus sagittalis) were examd. to det. the content in residual and lipoid N, the final NH_3 value and the content in NH_3-forming substances (in mg.% N). The absorption spectra in the ultraviolet region were detd. and the physiol. action on isolated frog hearts was studied. The results are discussed at length.

M. G. Moore

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11F

The effect of reduced barometric pressure on bile secretion. B. B. Glikson and V. M. Rubel. *Bull. biol. méd. expil. U. R. S. S.* 9, 334-7(1940)(in English); cf. C. A. 35, 1849[8].—Exposure of dogs with gall-bladder fistulas to altitudes of 6000-8000 m. in a "baro-chamber" for 6 hrs. produced a decrease in bile secretion which continued in some cases for 2 months. An increase in concn. and in abs. amts. of org. solid residue, a fairly considerable increase in viscosity of the bile, and slight increases in bilirubin and bile acids were observed. Repeated exposure to high altitudes caused a more pronounced effect.

S. A. Karjala

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Ck

Effect of reduced barometric pressure on the bile-forming function of the liver. E. B. Glikson and V. M. Rubol. *Arch. sci. biol.* (U. S. S. R.) 58, No. 3, 76-85 (in English, 85-6)(1940).—A 6-hr. exposure of dogs with a bile-duct fistula to a pressure equiv. to altitudes of 6000 and 8000 m. decreases bile secretion and increases the dry residue and viscosity of the bile. Repeated exposures result in adaptation to reduced pressure and the changes are less marked, approaching normal values. Individual variation is common. The changes are due to O starvation of hepatic cells. T. Laanes

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

PROCESSES AND PROPERTIES INDEX

Lactic acid of the gastric juice in various illnesses of the stomach. V. M. Rubel. *Byull. Eksper. Biol. Med.* 18, No. 1/2, 46-9(1944).—Normal subjects had 1.4-2.0 to 7.7-9.7 mg. % of lactic acid (I) in the gastric juice. Conditions of gastric or intestinal ulcers showed no change in I, but showed an increased total acidity of the gastric juice. Pellagra cases showed a slight increase of I. Certain cases of gastritis showed huge increases of I, up to 45-54.8 mg. %. Other types of gastritis showed a decrease of I. Some observations on glycolytic activity in these cases are made. S. Gottlieb

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METALLURGICAL LITERATURE CLASSIFICATION

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

FD-1518

USSR/Medicine - Protein Metabolism

Card 1/1 : Pub 122-3/14

Author : Rubel', V. M.

Title : On the question of participation of the alimentary canal in intermediate protein metabolism in an organism

Periodical : Vest. AMN SSSR, 4, 13-20, Oct-Dec 1954

Abstract : Despite much research and experimentation on normal and starved dogs it is not yet possible to propound a theory that fits in with all the known facts regarding the problem of participation of the alimentary canal in intermediate protein metabolism. It cannot be definitely said that protein content of blood used in transfusion passes into the alimentary canal by means of transudation. Knowledge of biochemical processes in gastric juice formation within the glandular tissue of the alimentary canal may create possibility for its directed variability in case of some pathogenic condition. Importance of solution of such problems lies in their possible practical utilization in medicine and animal husbandry. Twenty Soviet references.

Institution :

Submitted :

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEL', V.M.

Mechanism of secretion of proteins with gastric juice. Vop.med. khim. 2 no.3:163-168 My-Je '56. (MLRA 9:10)

1. Laboratoriya fiziologii i patologii obmena veshchestv Insituta normal'noy i patologicheskoy fiziologii AMN SSSR, Moskva.
(GASTRIC JUICE,
proteins (Rus))
(PROTEINS, determination,
in gastric juice (Rus))

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEL, V.M.

Sulfhydryl compounds in tissues of the parotid glands and their secretory activity. Vop. med. khim. 5 no.1:6-9 Ja-F '59. (MIRA 12:3)

1. Biochemical Laboratory, Institute of Normal and Pathological Physiology. The USSR Academy of Medical Sciences, Moscow.
(MERCAPTO COMPOUNDS, metab.
parotid gland, secretory funct. (Rus))
(PAROTID GLANDS, metab.
sulfhydryl cpds., secretory funct. (Rus))

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEL', V.M.

Characteristics of the biochemical composition of various regions of the myocardium. Vop.med.khim. 10 no.3:238-246 My-Je '64. (MIRA 18:2)

1. Institut normal'noy i patologicheskoy fiziologii AMN SSSR, Moskva.

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEL', V.M.; APANASYUK, M.P. [deceased]; MEYERSON, F.Z.

Metabolism of myocardial substances in compensatory hyperfunction of the heart. Myocardial carbonic anhydrase activity in compensatory hyperfunction and hypertrophy of the heart. Vop. med. khim. 9 no.1:57-60 Ja-F '63. (MIRA 17:6)

1. Laboratoriya fiziologii i patofiziologii serdechnoy deyatel'nosti i laboratoriya biokhimii, Institut normal'noy i patologicheskoy fiziologii AMN SSSR, Moskva.

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RUBEL', V.M.

Biochemistry of the heart muscle in myocardial infarct. Vop. med. khim. 8 no.3:227-236 My-Je '62. (MIRA 15:7)

1. Institut normal'noy i patologicheskoy fiziologii AMN SSSR, Moskva.

(HEART—INFARCTION) (HEART—MUSCLE)

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RUBEL', V.M.

Sulfhydryl groups in the tissue of the submaxillary gland after its parasympathetic innervation has been damaged. Biul. eksp. biol. i med. 51 no.4:62-66 Ap '61. (MIRA 14:8)

1. Iz laboratorii biokhimii (zav. - prof. V.M.Rubel') Instituta normal'noy i patologicheskoy fiziologii (dir. - deystvitel'nyy chlen AMN SSSR V.V.Parin) AMN SSSR, Moskva. Predstavlena k pechati deystvitel'nym chlenom AMN SSSR V.V. Parinym).
(MERCAPTO GROUP) (SUBMAXILLARY GLAND)
(NERVOUS SYSTEM, PARASYMPATHETIC)

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEL, V. M., CHERNYSHEVA, G. V., and MEYERSON, F. Z. (USSR)

"The Protein and Adenosintriphosphate Activity of Rabbit myocardium during Experimental Compensated Hyperfunction of the Heart."

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

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AUTHOR: Rubel', Yu.

TITLE: An Intercom Device Fed From Power Mains

PERIODICAL: Radio, 1959, Nr 7, pp 58-59 and p 3 of the cover (USSR)

ABSTRACT: The author describes an intercom device consisting of tubes 6N2P, 6N2P, and 6Ts5S. The amplifier consists of three stages. The first two stages are built with the 6N2P, while the 6P14P is used in the output stage. The circuit diagram of this intercom device is shown in Figure 1. The arrangement of the contacts is shown in Figure 2. TheKenotron 6Ts5S may be replaced by four germanium diodes of type DG-Ts27 or D7Zh. Loudspeakers of wire broadcast receivers "Baltika" were used. Power transformers from radios "Minsk", "VEF", "Ural" or similar receivers

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Röntgenographic characteristics of the anthracites from the Poltava-Bredino deposit. Ya. M. Chernousov and R. B. Rubel'-Chernousova. *Khim. Tverdogo Topliva* 7, 451-5(1936).—The Röntgen method gives an actual representation of the ash distribution in the org. mass of coal, and shows that the types contg. least ash are the spherical and the prismatic anthracites, with minerals condensed in the form of lenses or thin veins. These results are in complete agreement with those of petrographic and technical analysis. The Röntgen analyses of the anthracites by the Debeye-Scherrer method showed that the Debeye rings of the spherical and the prismatic anthracites correspond to the rings of normal, ungraphitized anthracites and the lines of the remaining types show the presence of graphite, quartz, kaolin, limonite and other minerals. The analytical data and pictures are given. A. A. Podgorny

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RUBEN, A.K. PA 41/49T35

USSR/Engineering Feb 49
Boilers
Separators

"The Combustion of Coal in Shaft Mills With Separating Insets in the Shaft," A. K. Ruben, Engr, 1 3/4 pp

"Elek Stants" No 2

Discusses operation and construction of a separating device placed in shaft of a boiler mill for greater efficiency. At present two boilers are operating with these separation devices. Gives table and diagrams of boilers.

FDB 41/49T35

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEN, B., gvardii kapitan, spetsial'nyy korrespondent (Kaliningrad)

End of an underground arsenal. Za rul. 17 no.2:4-5 F '59. (MIRA 12:3)

(Mines, Military)

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEN, Berngard Savel'yevich; IL'INSKAYA, Ye.A., red.; SRIBNIS, N.V., tekhn.red.

[Commander's fortune; a sketch] Schast'e komandira; ocherk. Moskva, Voen.izd-vo M-va obor. SSSR, 1962. 30 p. (MIRA 15:4)

(Karvatskii, Vitalii Samoilovich)

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEN, E. (Dnepropetrovsk)

Let's improve the design of potato warehouses. Sov. torg. 36 no.2:44-46 F '63. (MIRA 16:4)

1. Rukovoditel' tekhnologicheskoy gruppy Dnepropetrovskogo filiala Ukrgiprotorga.

(Potatoes—Storage)

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEN, F.

Volumetric determination of sulfonamide and its derivatives.
Cesk. farm. 2 no.9:295-299 Sept 1953. (CLML 25:4)

1. Of the Research Pharmaceutical and Biochemical Institute.

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

AUTHOR: Ruben, G. and Masevich, A. 33-5-6/12

TITLE: An Investigation of Evolutionary Sequences of Homogeneous Stellar Models with a Convective Nucleus. (Issledovaniye Evolyutsionnykh Posledovatel'nostey Odnorodnykh Zvezdnykh Modeley s Konvektivnym Yadrom.)

PERIODICAL: Astronomicheskiy Zhurnal, 1957, Vol.34, No.5, pp. 724-738 (USSR).

ABSTRACT: A detailed calculation using the stellar model with a convertive nucleus and the absorption law $K = K_0 \rho^{0.875} T^{-3.5}$ has been carried out by one of the present authors in Refs. 1 and 2. Possible ways of developing this model in the case of homogeneous and inhomogeneous chemical composition were considered in application to stars of the main sequence. In the present work the possibility of an application of such a model to the problem of structure and evolution of stars of other sequences in Russell's diagram is considered. The authors start with a model having the same chemical composition in both the shell and the convective nucleus. The carbon cyclic reaction is taken as the source of energy according to $\varepsilon = \varepsilon_0 XZ\rho T^n$. The continuous evolution (as a result of gradual transformation of hydrogen into helium) of such a model is considered

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33-5-6/12

An Investigation of Evolutionary Sequences of Homogeneous Stellar Models with a Convective Nucleus.

in the case of constant and variable mass. Using the notation of References 1 and 2 the relation between the luminosity L_1 and the stellar mass M_1 is written in the form $L_1 = M_1^{\gamma}$. Figure 1 shows the calculated dependence of $\lg L_1$ on $\lg R_1$ for different values of γ where R_1 is the relative radius. The relation between these two quantities is linear. An analysis is given of the effect of different parameters on the form of evolutionary curves. Various possible laws of change of mass are considered (different γ in Ref. 5). In each of the models there is a limiting value of γ which depends on the form of the law of formation of energy but is almost independent of the model itself. Within the limits of each possible γ there are certain maximum values of M_0 and R_0 the absolute magnitude of which depends on the accepted model. It is shown that the theoretical curve corresponding to $\gamma = 3.9$ represents the main sequence quite well. Using other values of γ one obtains evolutionary sequences which do not correspond to real stellar sequences for which the mass is a function

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33-5-6/12

An Investigation of Evolutionary Sequences of Homogeneous Stellar Models with a Convective Nucleus.

of both the luminosity and radius. In the case of $\gamma = 3.9$ both M_0 and R_0 reach their maximum values at the same value of Z, where Z is the content of elements heavier than helium. Using results obtained for $\gamma \neq 3.9$ it is shown that the structure and evolution of a sub-dwarfs can be explained by the present model if one assumes that the amount of heavy elements in them is about 20 times less than in stars of the main sequence. Theoretically possible masses of such stars are comparable with the masses of real sub-dwarfs. On the other hand sub-giants can be explained on this model if one assumes that the amount of heavy elements in this group is four to five times higher than in the stars of the main sequence. This is in agreement with results obtained earlier (Ref. 5). It is pointed out that although it is possible to explain the structure of both sub-dwarfs and sub-giants on the above model using certain assumptions as to the heavy element content relative to the stars of the main sequence it must nevertheless be remembered that the necessary condition in all the calculations is full inter-mixing (same chemical composition in shell and nucleus) which in general may not be observed. There are 11 figures,

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33-5-6/12

An Investigation of Evolutionary Sequences of Homogeneous Stellar Models with a Convective Nucleus.

8 tables, 5 references, all of which are Slavic.

SUBMITTED: April, 12, 1957.

ASSOCIATION: State Astronomical Institute, imeni P.K. Shternberg, Potsdam Astronomical Observatory, German Democratic Republic. (Gos. Astronomicheskiy In-t im. P.K. Shternberga, Potsdamskaya Astronomicheskaya Observatoriya, Germanskaya Demokraticheskaya Respublika.)

AVAILABLE: Library of Congress.

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEN, G.V.

Problem of boundary conditions on the surface of stellar models. Astron. zhur. 40 no.5:855-864 S-O '63. (MIRA 16:11)

1. Potsdamskaya astrofizicheskaya observatoriya Germanskoy Demokraticheskoy Respubliki.

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEN, G.V.

Masses of the components of binary star γ Leonis. Astron.zhur. 38 no.3:491-495 My-Je '61. (MIRA 14:6)

1. Gosudarstvennyy astronomicheskiy institut imeni P.K.Shternberga.
(Stars, Double)

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEN, R.; MIOVSKI, D.; KOSTANTINOV, D.

Malignant tumors of the skin in our clinical material. God. zborn. med. fak. Skopje 11:119-123 '64.

1. Klinika za kozni i venerični bolesti na medicinskiot fakultet, Skopje (direktor: prof. d-r. D. Miovski).

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBENBAUER, T.

Professor Roman Borkowski, 1882-1963. Wszechswiat no.4:88 Ap '64.

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

S/182/60/000/006/002/009
A161/A029

AUTHOR: Rubenkova L.A.

TITLE: Determining the Plasticity of Sheet Steel by the Results of Hydrostatic Testing

PERIODICAL: Kuznechno-shtampovochnoye proizvodstvo, 1960, No. 6, pp. 12 - 13

TEXT: It has been proven in extrusion of complex parts (Ref. 1) that the plasticity of metal rises in the process and the moment of the stability loss is reached at considerably higher deformation in biaxial than in uniaxial tension. To check the theoretical conclusions, experiments have been carried out with specimens of cold-rolled 08кп (08kp) sheet steel, on a Р-5 (R-5) tension test machine for uniaxial tension, and a hydrostatic ИМАШ АН СССР (IMASh AS USSR) test installation designed for hydrostatic testing of specimens of 250 mm in diameter. Fluid pressure p, height of the extruded cup h and thickness t of the metal in the extrusion pole were measured. The article includes the calculation equations used for the approximate generatrix of the blank, the deformed diaphragm surface, the curve radius in the extrusion center, the normal stress at the extrusion apex, and the octahedral shear deformation. The curve plotted in biaxial tests con-

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S/182/60/000/006/002/009
A161/A029

Determining the Plasticity of Sheet Steel by the Results of Hydrostatic Testing

firms the previous conclusions. If in uniaxial tension the stability loss point is at the octahedral stress τ = 2,100 kg/cm^2 and octahedral shear deformation γ = 0.39, in biaxial tension this point is at τ = 3,340 kg/cm^2 and γ = 1.12. It is concluded that a hydrostatic test is a better means for testing the mechanical properties of sheet metal in plastic deformation than other deformation means. Its advantages are: a) Uniform fluid pressure on the specimen; b) The load drop at the moment of fracture is instantaneous; c) The surface finish of die and punch and the properties of the lubricant cannot distort the test result; d) The deformation rate is easily adjustable; e) The clamping pressure is constant and definite stress conditions can be produced. The hydrostatic method is recommended for testing the stamping properties of metal. There are 2 figures and 5 references: 4 Soviet, 1 English.

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEN, S. V.

RUBEN, S. V.

Boevye traditsii russkikh letchikov; ocherki iz istorii morskoi i sukhoputnoi aviatsii. Moskva, Voenno-morskoe izd-vo, 1943. 61 p., (Frontovaia biblioteka krasnoflottsa)

Title tr.: Fighting traditions of Russian pilots; historical sketches of naval and army aviation.

UG635.R9R8

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBEN, W.P.

Soviet Latvia on its road to communism. Przegl techn no.50:5,6 16 D '62.

1. Prezes Rady Ministrow Lotewskiej Socjalistycznej Republiki Radzieckiej, Riga.

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

Electrical condenser.—Samuel Ruben. U. S. 2,108,[illegible] 1935, Feb. 22. A plasticized nonrigid conductive sheet spacer for electrolytic condensers comprises a flexible non-fibrous gelatin sheet of a thickness not substantially greater than 0.003" impregnated with a conductive electrolyte such as glycol, boric acid and NH_4 borate.

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBENAU, Lev Sergeyevich; ZMEYEVA, N.Ya., kand.pedagog.nauk, red.; VENETSIANOVA, Ye.S., bibliograf.red.

[Atomic energy in the service of peace; materials for exhibitions of books and illustrations] Atomnaia energiia na sluzhbe mira; materialy dlia knizhno-illiustrativnykh vystavok. Leningrad, Gos.publichnaia biblioteka im. M.E. Saltykova-Shchedrina, 1960. 37 p. (MIRA 13:9)
(Atomic energy--Exhibitions)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBENCHIK, B.L. [Rubenchyk, B.L.]

Pyrophosphatase of animal tissues. Visnyk Kyiv.un. no.1. Ser. biol. no.2:193-198 '58. (MIRA 16:4)
(PYROPHOSPHATASE)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBENCHIK, B.L.

Changes in the biochemical indices of the liver tissue of rats following the administration of hepatocarcinogens of different chemical structures. Vop. onk. 11 no.3:63-68 '65.
(MIRA 18:6)

1. Iz laboratorii kantserogennykh veshchestv Ukrainskogo nauchno-issledovatel'skogo instituta pitaniya Ministerstva zdravookhraneniya UkrSSR (dir. - kand. med. nauk P.D. Leshchenko).

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBENCHIK, B.L. [Rubenchyk, B.L.]

Study of the proteins of the renal medullary substance in normal rabbits and in rabbits with experimental nephritis. Ukr.biokhim. zhur. 32 no.1:44-53 '60. (MIRA 13:6)

1. Department of Faculty Therapeutic Clinic of the Kiyev Medical Institute.
(KIDNEYS--DISEASES) (PROTEINS)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

BYKOREZ, A.I. [Bykoriez, A.I.]; RUBENCHIK, B.L. [Rubenchyk, B.L.]

Inducing tumors in the rat liver with thioacetamide. Dop. AN URSR no.2:257-260 '64. (MIRA 17:5)

1. Ukrainskiy nauchno-issledovatel'skiy eksperimental'noy i klinicheskoy onkologii Ministerstva zdravookhraneniya UkrSSR i Ukrainskiy nauchno-issledovatel'skiy institut pitaniya Ministerstva zdravookhraneniya UkrSSR. Predstavleno akademikom AN UkrSSR R.Ye. Kavetskim [Kavetsk'kyi, R.IE.].

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBENCHIK, B. L. (Kiyev)

Possible cancerogenic action of some substances in food products. Vrach. delo no.7:137-138 Jl '62. (MIRA 15:7)

(CARCINOGENS) (FOOD CONTAMINATION)

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBENCHIK, B.L. (Kiyev ul. Chelyuskintsev, 15, kv. 18); BYKOREZ, A.I. (Kiyev, ul. Pushkinskaya, 25, kv.1)

Biochemical and morphological changes in the liver of rats during carcinogenesis induced by p-dimethylaminoazobenzene and following amaranth introduction. Vopr. onk. 9 no.4:68-75 '63. (MIRA 17:9)

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBENCHIK, B.L.

Change in the riboflavin levels in rats during cancerogenesis induced with p-dimethylaminoazobenzene and following the administration of the food-dye, amaranth. Vop. pit. 22 no.3: 72-78 My-Je '63. (MIRA 17:8)

1. Iz laboratorii kantserogennykh veshchestv Ukrainskogo nauchno-issledovatel'skogo instituta pitaniya Ministerstva zdravookhraneniya UkrSSR, Kiyev.

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BOLDIN, P.V.; POTSELUYEV, V.I.; RUBINCHIK, B.M.; SMIRNOVA, V.V.; ARTYUKHIN, V.A., red.izd-va; TIKHANOV, A.Ya., tekhn. red.

[Foundry equipment; a catalog] Liteinoe oborudovanie; katalog. Moskva, Mashgiz, 1963. 242 p. (MIRA 16:11)

1. Moscow. Gosudarstvennyy nauchno-issledovatel'skiy institut liteynogo mashinostroyeniya i liteynoy tekhnologii.
(Foundries--Equipment and supplies)

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBENCHIK, B.Ya.

Control of the initial radial gap of miniature bearings. Izm. tekh. no.8:53-54 Ag '65. (MIRA 18:9)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBENCHIK, B.Ya.

Devices for checking the diameter of ring grooves. Izm.tekh. no.9:57-58 S '65. (MIRA 18:10)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBENCHIK, I. M., Cand of Tech Sci -- (diss) "Investigation of the Stability of Slit and Steep Drainage in Swamps Drained for Agricultural Use in Belorussian SSR," Minsk, 1959, 21 pp (Belorussian Polytechnical Institute im Stalin) (KL, 2-60, 114)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBENCHIK, I.M.

IVITSKIY, A.I.; RUBENCHIK, I.M.

[Brief manual on mole drainage of bog soils] Kratkoe rukovodstvo po ustroistvu krotovogo drenazha v torfiano-bolotnykh pochvakh. Minsk, Akademiia nauk BSSR, 1954. 22 p. (MLRA 10:4)
(Drainage)

APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9"

"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

STAROBINETS, G.L.; RUBENCHIK, K.F.

Jet-electrochemical method for determining the thickness of electroplating. Uch.zap. BGU no.29:175-177 '56. (MIRA 11:11)
(Electroplating--Testing) (Thickness measurement)

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

RUBENCHIK, N.F.

I-9

USSR/Chemical Technology - Chemical Products and Their Applications - Electrochemical Manufacturing. Electrodeposition. Chemical Sources of Electric Current.

Abs Jour : Ref Zhur - Khimiya, No 3, 1957, 8909

Author : Zhinivich, N.I., Menkina, M.M., and Rubenchik, K.F.

Inst : Belorussian Polytechnical Institute.

Title : Nickel-Plating with an Electric Current of Periodically Changing Direction.

Orig Pub : Sb. nauch. rabot Belorus. politekhn. in-ta, 1956, No 55, 103-108

Abstract : The effect of periodic changes in the direction of the current during the electrolytic deposition of Ni under various conditions of composition and acidity in the bath, temperature,

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USSR/Chemical Technology - Chemical Products and Their Applications - Electrochemical Manufacturing. Electrodeposition. Chemical Sources of Electric Current. I-9

Abs Jour : Ref Zhur - Khimiya, No 3, 1957, 8909

D, plating time, switching frequency, and holding time of the articles in the anodic or cathodic position has been investigated. The direction of the current was reversed by means of a throw-switch; the switching frequency was controlled with a stop watch. Before plating, the steel specimens were cleaned with emery paper followed by boiling in alkali and dipping in HCL solution. The current efficiency of the plating process was determined by the use of a copper coulometer. The experiments were repeated 2-3 times and the control experiment in which

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"APPROVED FOR RELEASE: 08/22/2000 CIA-RDP86-00513R001445810009-9

USSR/Chemical Technology - Chemical Products and Their Applications - Electrochemical Manufacturing. Electrodeposition. I-9

Abs Jour : Ref Zhur - Khimiya, No 3, 1957, 8909

the current direction was not reversed was carried out in all cases. It has been established that the quality of the deposit, the current efficiency, and the thickness of the deposit all decrease markedly with the length of time that the articles are left in the anodic position: this time was taken at 1 sec. Better results were obtained with electrolytes containing (in gms/liter) $NiSO_4 \cdot 7H_2O$, 238; Na_2SO_4, 20; NaCl, 5; and Na_3BO_3, 20 at pH 5.3 - 5.1 with 6 reversals of polarity per minute. Smoother and more lustrous deposits are obtained when the articles are left in

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