ROZENFEL'D, S.E.

OZNOBIN,N.M.; ROZENFEL'D,Sh.L.

Problems of subdivision within a basic economic region (exemplified by Buryat-Mongolian A.S.S.R.). Izv.AN SSSR. Ser.geog. no.4:46-56 Jl-Ag'55. (MLRA 8:10)
(Buryat-Mongolian A.S.S.R.--Geography, Economic)

FEYGIN, Ya.G., doktor ekon.nauk; VILENSKIY, M.A., kand.ekon.nauk; OMAROVSKIY, A.G., kand.ekon.nauk; LIVSHITS, R.S., doktor ekon.nauk; CHUGUNOV, B.I., kand.ekon.nauk; SHOKIN, N.A., kand.ekon.nauk; IOFFE, Ya.A.; VARANKIN, V.V., kand.ekon.nauk; ROZENFEL'D, Sh.L., kand.ekon.nauk; KORNEYEV, A.M., doktor ekon.nauk; OPATSKIY, L.Y., doktor ekon.nauk; VASIL'YEV, N.V., doktor ekon.nauk; RUDENKO, N.A., kand.ekon.nauk; BYSTROZOROV, A.S., kand.geogr.nauk; POPOVA, Ye.I., kand.ekon.nauk; KRUTIKOV, I.P., kand.geogr.nauk; BAKOVETSKAYA, V.S., red.izd-va; SHEVCHENKO, G.N., tekhn.red.

[Special features and factors in the distribution of branches of the national economy of the U.S.S.R.] Osobennosti i faktory razmeshcheniia otraslei narodnogo khoziaistva SSSR. Moskva, 1960. 692 p. (MIRA 14:3)

1. Akademiya nauk SSSR. Institut ekonomiki.
(Economic zoning)

ROZENFEL'D, SHMUL LEVBOVICH

Razvitiye I Razmeshcheniye Promyshlennosti Stroitel'nykh Materialov SSSR.
Moskva, Gosplanizdat, 1960
180 (1) p. tables
Bibliography: P. 180-(181)

ROZENFEL'D, V. A.

Rozenfel'd, V. A. Projective geometries on quaternions and pseudoquaternions. Doklady Akad. Nauk SSSR (N.S.) 74, 421–424 (1950). (Russian)

A pseudoquaternion $a+bi+ce+df$ where $i^2=-1$, $e^2=+1$, $ie=-ei=f$ may be associated with a matrix $\begin{pmatrix} a+d & b+c \\ -b+c & a-d \end{pmatrix}$ and this in turn with the two vectors $(a+d, -b+c)$ and $(b+c, a-d)$. More generally a vector $(A_1, \cdots, A_m)$ of pseudoquaternions A_i may be associated with two real vectors with $2m$ components. Using this association the author shows, among other things, that the collineation group of a projective space of dimension n over the ring of pseudoquaternions is isomorphic to the collineation group of the projective space of dimension $2n+1$ over the real numbers. *M. Hall* (Washington, D. C.).

Source: Mathematical Reviews, Vol 12 No. 1

Rozenfel'd, V.D.

ROZENFEL'D, V.D.

Typhoidal infection caused by Salmonella typhimurium (Copenhagen variety). Zhur.mikrobiol.epid. i immun.,supplement for 1956:19 '57 (MIRA 11:3)

1. Iz Tashkentskogo instituta vaktsin i syvorotok.
(TYPHOID FEVER) (SALMONELLA TYPHIMURIUM)

USSR/Microbiology - Microorganisms Pathogenic to Humans and Animals. F-4

Abs Jour : Ref Zhur - Biol., No 10, 1958, 43271

Author : Rozenfeld, V.D.
Inst : -
Title : Dwarf Forms of Typhoid Fever Baceillus.

Orig Pub : Vopr. kraevoy patol. AN UzSSR, 1956, No 8, 49-59.

Abstract : 15 cases are described of isolating of dwarf strains of typhoid fever bacteria (9 from blood and 6 from feces). These strains, while they differed in some properties (inhibited growth; small size of colonies and individual bacilli; immobility) retained typical properties of typhoid fever bacilli-- biochemical, serological, and pathogenic. The distinguishing characteristic was either the absence or a weak manufestation of N-antigens, which corresponds to a loss of mobility in these variants. When the dwarf variants were inoculated on media with

Card 1/2

USSR/Microbiology - Microorganisms Pathogenic to Humans and Animals. F-4

Abs Jour : Ref Zhur - Biol., No 10, 1958, 43306

Author : Rozenfeld, V.D.
Inst :
Title : A Case of a Typhus-Like Disease Caused by Breslau Bacillus (Variant Copenhagen).

Orig Pub : Zh. mikrobiol., epidemiol. i immunobiologii, 1956, (1957), 19.

Abstract : From a 5-year old child with a typhus-like disease accompanied by prolonged high temperature and marked symptons of vervous system disturbance, a culture was isolated from the blood and joint fluids which originally was identified as a typhoid-fever type. In a study of the receptor apparatus it was established that the culture had an antigen make-up of Iv, 1:1, 2, corresponding to Salmonella typhimurium, variant Copenhagen.

Card 1/2

ROZENFEL'D, V. D.

Dissertation: "Serological and Bacteriological Diagnosis of Typhus-Paratyphus Diseases in Children and Characteristics of Isolated Cultures." Cand Med Sci, Tashkent State Medical Inst, 30 Jun 54. (Pravda Vostoka, Tashkent, 19 Jun 54)

SO: SUM 318, 23 Dec 1954

BRAY, I. V., inzh.; MASLENKOVSKIY, L. G., inzh.; SADOV, D. A., inzh.; ROZENFEL'D, V. F., inzh.

Use of silica gell with activated gaseous ammonia for regenerating the insulating oil of operating transformers. Energetik 10 no.8: 23-26 Ag '62. (MIRA 15:10)

(Insulating oils) (Electric transformers)

NESTEROVSKIY, B.; ROZENFEL'D, V., inzh.

Eliminate the causes of irregular work. Mor.flot. 24 no.8:8-9 Ag '64. (MIRA 18:9)

1. Starshiy inzh. otdela truda i zarabotnoy platy Nikolayevskogo porta (for Nesterovskiy). 2. Predsedatel' gruppy sodeystviya partgoskontrolyu 2-go uchastka Nikolayevskogo porta (for Nesterovskiy). 2. Predsedatel' gruppy sodeystviya partgoskontrolyu 2-go uchastka Nikolayevskogo porta (for Rozenfel'd).

SOV/110-58-7-15/21

AUTHOR: Rozenfeld, V.I., Engineer, and Krasheninnikov, I.I., Engineer.

TITLE: Thyratron time-relays.
(Tiratronnyye rele vremeni)

PERIODICAL: Vestnik Elektropromyshlennosti, 1958, Nr 7, pp 52-56. (USSR)

ABSTRACT: It is claimed that thyratron time-relays do not suffer from many of the defects of other types. They are simple, cheap, reliable and have long life. By using a cold-cathode thyratron the relay is always ready for use. The relay can be made to operate up to ten times a second and the power consumption is only 5 - 8 VA. The principle of operation is explained with reference to the circuit given in Fig 1. When the operating switch is closed, voltage is applied to a resistance/capacitance charging circuit; the time delay depends on the rate of voltage build-up in the capacitor, a formula for which is given. The accuracy of the relay time-setting is affected by voltage variations of the power source, changes in the ignition voltage of

Card 1/4

Thyratron time-relays.

the thyratron and the values of R and C. It may be necessary to use a voltage supply stabiliser. The thyratron ignition voltage is affected by the ambient temperature to some extent: also, the resistance and capacitance values may change as the components age. It is important that the insulation resistance of the components should be good, else the errors increase. However, in practice, very satisfactory results can be obtained without using expensive or scarce components. The time-delay that can be obtained is limited by a number of factors, for instance the operating time of the output relay is of the order of 0.1 secs and if the time of operation is more than about 5 minutes the time-constant and leakage of the capacitor begin to take effect. A

...yratron time-relays.

number of examples of thyratron time-relays are then given. A circuit in which the thyratron operates only whilst the output relay is actually operating is given in Fig 3. The circuit of time-relay type VL-1 is given in Fig 4 and the operation of the relay is explained; the method of connection is shown in Fig 5 and a photograph of the relay in Fig 6. The relay may be used on circuits of 127 or 220 V with time-delays of 0.5 - 95 secs. or 85 - 180 secs, the range being selected by means of a switch. The switching relay can interrupt inductive loads of 40W in a 220 V d.c. circuit or 250 VA in an a.c. circuit. Variations in the time setting may be up to ± 15%. Time-relay type VL-2, which uses a paper/foil capacitor instead of metallised paper has greater accuracy and can operate over a wider temperature range. In other respects it is the same as type VL-1. Type VL-3 covers the same time-range as VL-1 but uses a paper/foil capacitor; it has two contactors of higher rupturing capacity and the thyratron operates only whilst the output relay is operating, so that the life is better. This relay is

Thyratron time-relays.

recommended for use in automatic schemes where high accuracy is required over a wide range of ambient temperature. Relay type VL-4 is intended for automatic time-delay setting during photographic printing; the time-delay varies from 0.5 - 30 seconds. It can operate a 250W enlarger lamp. There are 7 figures.

Card 4/4

1. Thyratrons--Design 2. Thyratrons--Performance

PARNAS, Yakov Oskarovich, akademik [deceased]; DZBANOVSKAYA, A.Ye. [translator]; ROZENGARD, V.I. [translator]; TOLKACHEVSKAYA, N.F. [translator]; STEPANENKO, B.N., otv.red.; BRAUNSHTEYN, A.Ye., red.; KOTEL'NIKOVA, A.V., red.; SEVERIN, S.Ye., red.; ENGEL'GARDT, V.A., red.; KOLPAKOVA, Ye.A., red.izd-va; POLYNOVA, T.P., tekhn.red.

[Collected works] Izbrannye trudy. Moskva, Izd-vo Akad.nauk SSSR, 1960. 491 p. (MIRA 13:7)
(NITROGEN--ANALYSIS) (NAPHTHOQUINONE) (BIOCHEMISTRY)

ROZENFEL'D, V.L. (Yaroslavl').

Simple model for the manual separation of placenta. Fel'd.i akush. no.1:42-44 Ja '54. (MLRA 7:1)
(Placenta) (Labor, Complicated)

SMIRNOV, V.A.; ROZENFEL'D, V.M.; LYAKHOVA, R.P.

Determining the optimum variant of the gas-supply system for centralized gas consumers. Gaz. delo no.7:27-30 '65. (MIRA 18:9)

1. Saratovskiy gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut po ispol'zovaniyu gaza v narodnom khozyaystve.

ROZENFEL'D, V.M., mladshiy nauchnyy sotrudnik

Effect of pipe standard on the capital investment in municipal l-p gas systems. Ispol'. gaza v nar. khoz. no.2:155-158 '63. (MIRA 18:9)

1. Laboratoriya tekhniko-ekonomicheskikh izyskaniy Saratovskogo gosudarstvennogo nauchno-issledovatel'skogo i proyektnogo instituta po ispol'zovaniyu gaza v narodnom khozyaystve.

SMIRNOV, V. A.; ROZENFEL'D, V. M.; LYAKHOVA, R. P.

Efficiency in the full utilization of optimal pressure drop in city gas metworks. Gaz. delo no. 11:30-34 '63. (MIRA 17:5)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut po ispol'zovaniyu gaza v narodnom khozyaystve.

KALASHNIKOV, V.I., inzh.; KUZIN, M.D., inzh.; ROZENFEL'D, V.S., inzh.; SHAVEL'ZON, M.V., inzh.

Automatization of technological processes in autoclaves. Stroi. mat. 5 no.6:18-20 Je '59. (MIRA 12:8)
(Autoclaves) (Automatic control)

ROZENFEL'D, Vladimir Yakovlevich

[Those who have exceeded the twenty-five thousand mark] Dvadtsatipiatitysiachniki. Moskva, Sel'khozgiz, 1957. 118 p. (MIRA 11:4)
(Collective farms)

ROZENFEL'D, V.Ye., prof., doktor tekhn. nauk; SHEVCHENKO, V.V., kand. tekhn. nauk; MAYBOGA, V.A., kand. tekhn. nauk; TIMONOV, Ye.V., inzh.; KRUSHINSKIY, G.A., inzh.

Electric power supply to passenger cars from the overhead contact system. Zhel. dor. transp. 47 no.9:64-68 S '65. (MIRA 18:9)

ROZENFEL'D, V. E.

Elektricheskaia tiaga poezdov. [Trains with electric tractions]. Pod obschei red. V. E. Rozenfel'da. Moskva, Transzheldorizdat, 1940, 799 p. illus., diagrs. (1 fold.)
"Uchebnik dlia vtuzov zheleznodorozhnogo transporta."
DLC: TF935.R6

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

ROZENFEL'D, V. E., PROF

FA 29T28

USSR/Electricity Sep 1947
Railroads, Electric
Circuits, Analysis

"Analytical Computations of Electric Train Circuits," Prof V. E. Rozenfel'd, Dr of Technical Sciences, Moscow Energy Institute imeni Molotov, 12 pp

"Elektrichestvo" No 9

Analyzes modern methods of electrical computation of traction circuits and establishes the more important sources of these methods. These methods are used to determine average and effective loads, average loss of voltage and loss of power, effect of variation in the number of trains, the effect of the resistance of

LC 29T28

USSR/Electricity (Contd) Sep 1947

feeder lines and substations. These methods may be utilized for any electrical circuits that are called upon to meet fluctuating demand.

LC 29T28

ROZENFEL'D, VITALIY YEVGEN'YEVICH

ROZENFEL'D, Vitaliy Yevgen'yevich, d-r tekhn.nauk, prof.; SIDOROV, Nikolay Nikolayevich; KUZIN, Sergey Yefimovich; VLASOV, Ivan Ivanovich; SIDOROV, N.I., inzh., red.; VERINA, G.P., tekhn.red.

[Electric railroads] Elektricheskie zheleznye dorogi. Izd.2-oe, perer. Pod obshchei red.V.E.Rozenfel'da. Moskva, Gos.transp. zhel-dor.izd-vo, 1957. 431 p. (MIRA 11:1)
(Electric railroads)

ROZENFEL'D, V. YE.

Chernyshev, M. A. defended his Doctor's dissertation in the All-Union Research Institute of Railway Transport, USSR, on 24 December 1948, for the academic degree of Doctor of Technical Sciences.

Dissertation: "Recovery of Energy at Rectifier Substations Without Using Special Power Transformers".

Official Opponents: Profs. V. Ye. Rozenfel'd, V. V. Yasinskiy, and I. L. Kaganov (Doctors of Technical Sciences).

SO: Elektrichestvo, No. 7, Moscow, August 1953, pp 87-92 (W/29344, 16 Apr 54)

ROZENFELD, V. YE.

23219 pudnichnyy elektrovoz peremennogo toka s kondensatornymi dvigatelyami. Elektrichestvo, 1949, No. 7, c. 37-42.

SO: LETOPIS' NO. 31, 1949

ROZENFEL'S, Vitaliy Yevgen'yevich
ROZENFEL'D, V. Ye.

"An AC Mining Locomotive Using Capacitor Motors," Elektrichestvo, No. 7, 1949.

Prof. Dr. Tech. Sci.

ROZENFEL'D, V.Ye.; SIDOROV, N.N.; KUZIN, S.Ye.; RAKOV, V.A., redaktor; VEHINA, G.P., tekhnicheskiy redaktor.

[Electric railroads] Elektricheskie zheleznye dorogi. Moskva, Gos. transp. zhel-dor. izd-vo, 1951. 536 p. (MLRA 8:2)
(Electric railroads)

ROZENFELD, V.

ROZENFELD, V. ; NEKRASOV, O.

"Condenser" electric locomotive for mines. Tr. from the Russian. p. 86
(Mechanisace. Praha. Vol. 2, no. 2/3, Feb./Mar. 1953)
SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 6,
June 1955, Uncl.

ROZENFEL'D, V.E.

4

3510. CONTACTLESS HIGH FREQUENCY ELECTRIC MINE HAULAGE SYSTEMS. Staroskol'skii, N.A., Bakhmutskii, F.I., Kemenetskii, B.O. and Rosenfel'd, V.E. (Elektrichestvo (Electricity, U.S.S.R.), Apr. 1956, 28-31; abridged in Engrs' Dig., July 1956, vol. 17, 279, 280). The following system for dangerous mines has been the subject of successful experiments in Donbass. A high frequency generator supplies two insulated cables above the track with condensers installed at 500-600 m intervals. The locomotive incorporates a flat power receiver consisting of several turns of a special cable, which is divided into sections connected between the units of a battery of condensers, so that inductive resistance is compensated. The best frequency is 4000-5000 c/s. The current is rectified and used in d.c. traction motors. (L).

Moscow Power Engr. Inst. im Molotov
Dr. Tech. Sci., Prof.

YEFREMOV, I.S.; MINOV, D.K.; PETROV, I.I.; ROZENFELID, V.Ye.; SVENCHANSKIY, A.D.; SOKOLOV, M.M.; RUFRYANSKIY, N.A.; CHILIKIN, M.G.

Aleksandr Dmitrievich Stepanov, 1904- ; on his 60th birthday.
Elektrichestvo no.9:93 S '64.

(MIRA 17:10)

ROZENFEL'D, Vitaliy Yevgen'yevich, doktor tekhn. nauk, prof.;
STAROSKOL'SKIY, Nikolay Aleksandrovich, kand. tekhn. nauk, dotsent;
DOVZHIN, Vladimir Iosifovich, aspirant [deceased]

Control of high-frequency mine locomotive using magnetic amplifiers.
Izv. vys. ucheb. zav.; elektromekh. 8 no.11:1294-1299 '65.
(MIRA 19:1)

ROZENFEL'D, V.Ye., doktor tekhn. nauk; SHEVCHENKO, V.V., kand. tekhn. nauk; MAYBOGA, V.A., kand. tekhn. nauk; DOLABERIDZE, G.P., inzh.

Increasing of the voltages of d.c. electrified railroads. Elektrichestvo no.7:37-44 Jl '65. (MIRA 18:7)

1. Moskovskiy energeticheskiy institut.

ROZENFEL'D, Vitaliy Yevgen'yevich; ISAYEV, Igor' Petrovich; SIDOROV, Nikolay Nikolayevich; DYAD'KOV, A.M., kand. tekhn. nauk, retsenzent; KALININ, V.K., kand. tekhn. nauk, red.; BOBROVA, Ye.N., tekhn. red.

[Electric traction]Elektricheskaia tiaga. Moskva, Transzheldorizdat, 1962. 346 p. (MIRA 16:1)
(Electric railway motors)

ROZENFEL'D, V.Ye., prof., doktor tekhn.nauk; SHEVCHENKO, V.V., kand.tekhn. nauk; MAYBOGA, V.A., kand.tekhn.nauk

Use of direct high voltage current for electric traction. Zhel. dor.transp. 44 no.7:35-39 Jl '62. (MIRA 15:8)
(Electric railroads--Current supply)

BESHCHEVA, N.I., kand. tekhn. nauk; ROZENFEL'D, V.Ye., prof., retsenzent; ZELENSKIY, Yu.I., inzh., retsenzent; CHERNYAVSKIY, V.Ya., inzh., red.; USENKO, L.A., tekhn. red.

[Suburban traffic on electric railroads] Prigorodnoe dvizhenie na elektrifitsirovannykh liniiakh. Moskva, Vses. izdatel'sko-poligr. ob"edinenie M-va putei soobshcheniia, 1961. 371 p. (Moscow. Vsesoiuznyi nauchno-issledovatel'skii institut zheleznodorozhnogo transporta. Trudy, no. 233.) (MIRA 15:5)
(Electric railroads--Commuting traffic)

MEDEL', V.B., prof., doktor tekhn.nauk; ROZENFEL'D, V.Ye., prof., doktor tekhn.nauk; ISAYEV, I.P., prof., doktor tekhn.nauk

Textbook on the rolling stock of electric railroads ("Rolling stock of electric railroads" by B.M.Tikhmenev, L.M.Trakhtman. Reviewed by V.B.Medel', V.E.Rozenfel'd, I.P.Isaev). Zhel.dor. transp. 43 no.5:95-96 My '61. (MIRA 14:4)

(Electric railroads--Rolling stock)
(Tikhmenev, B.M.) (Trakhtman, L.M.)

GUBENKO, T.P.; DEVYATKOV, N.D.; DOMANSKIY, B.I.; DONSKOY, A.V.; YEFREMOV, I.S.; ZHEZHERIN, R.P.; KAGANOV, I.L.; MANDRUS, D.B.; NETUSHIL, A.V.; PODGURSKIY, Ye.L.; ROZENFEL'D, V.Ye.; SVENCHANSKIY, A.D.; CHUKAYEV, D.S.; SHLYAPOSHNIKOV, B.M.

Professor G.I. Babat; obituary. Elektrichestvo no.1:94 Ja '61. (MIRA 14:4)

(Babat, Georgii Il'ich, 1911-1961)

PETROV, G.N.; ROZENFEL'D, V.Ye.; KAGANOV, I.L.; PETROV, I.I.; STAROSKOL'SKIY, N.A.; TARE, B.M.

Vasilii Aleksandrovich Iz"iurov. Elektrichestvo no.7:93 Jl '60. (MIRA 13:8)
(Iz"iurov, Vasilii Aleksandrovich, 1885-)

BAKHMUTSKIY, F.I., inzh.; OROKHOVSKIY, I.I.; KHARLAMOV, V.V., inzh.; ROZENFEL'D, Y.Ye., doktor tekhn.nauk; STAROSKOL'SKIY, N.A., kand.tekhn.nauk, dots.

Mine haulage by means of high-frequency electric locomotives. Ugol' 35 no.6:29-33 Je '60. (MIRA 13:7)

1. Donguiprouglemash (Bakhmutskiy, Orokhovskiy, Kharlamov). 2. Moskovskiy energeticheskiy institut (for Rozenfel'd, Staroskol'skiy).
(Mine railroads)
(Electric locomotives)

ROZENFEL'D, V. Ye., doktor tekhn.nauk, prof.; POPELYASH, V.N., inzh.; SMIRNOV, A.G., inzh.

Investigating the three-wire supply system for trolley-buses. Elektrichestvo no.3:60-64 Mr '60. (MIRA 13:6)
(Trolley buses)

GARRO, M. [Garreau, Marcel]; VISLOUKH, L.A., inzh. [translator]; TRAKHTMAN, L.M., kand.tekhn.nauk [translator]; IVANOV, I.I., kand.tekhn.nauk [translator]; ROZENFEL'D, V.Ye., prof., doktor tekhn.nauk, obshchiy red.; BOBROVA, Ye.N., tekhn.red.

[Electric traction] Elektricheskaia tiaga. Pod obshchei red. V.E.Rozenfel'da. Moskva, Gos.transp.zhel-dor.izd-vo, 1959. 386 p. Translated from the French. (MIRA 13:3)
(Electric railroads)

ROZENFEL'D, Ya. Ye.

SOV/105-59-12-21/23

8(0)
AUTHORS: Chilikin, M. G., Tikhomirov, S. S., Trofimov, A. N., Ivanov, I.T., Rozenfel'd, Ya. Ye., Minov, D. K., Medel', V. B.

TITLE: Professor I. S. Yefremov, On His 50th Birthday

PERIODICAL: Elektrichestvo, 1959, Nr 12, p 83 (USSR)

ABSTRACT: Ivan Semenovich Yefremov was born in July 1909. In 1935 he graduated from the fakul'tet elektrifikatsii (Department of Electrification) of the Moskovskiy elektromekhanicheskiy institut inzhenerov zheleznodorozhnogo transporta (Moscow Electromechanical Institute for Railroad Engineers). He is working since then at the Trolley-Administration of Moscow, where he became plant manager, after being foreman and chief engineer. He takes part in the scientific work of the research laboratory of the gorodskoy elektricheskiy transport Akademii komunal'nogo khozyaystva (Municipal Electrical Transportation of the Academy of Communal Economy). In 1946 he graduated as Candidate of Technical Sciences, in 1949 he was elected the chief of the kafedra elektricheskoy tyagi i podvizhnogo sostava Moskovskogo avtodorozhnogo instituta (Chair of Electrical Traction and Vehicles of the Moscow Institute of Highways).

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In March 1956 he became head of the kafedra elektricheskogo transporta of the Moskovskiy energeticheskiy institut (Chair of Electrical Transportation of the Moscow Institute of Power Engineering). He still holds this position. In April 1959 he became dean of the fakul'tet elektrifikatsii promyshlennosti i transporta MEI (Department of Electrification of the Industry and Transportation at the Moscow Institute of Power Engineering). In 1954 he graduated as Doctor of Technical Sciences and became Professor. Since 5 years he is a member of the ekspertnaya komissiya VAK (Expert Commission of the VAK) and the Nauchno-tekhnicheskiy sovet Ministerstva komunal'nogo khozyaystva RSFSR (Scientific-technical Council at the Ministry for Communal Economy of the RSFSR). He has the order "Patriotic war 1st Class" and several other medals. There is 1 figure.

Card 2/2

ROZENFEL'D, V.Ye., prof., doktor tekhn.nauk; SIDOROV, N.N., kand.tekhn.nauk.
(g. Leningrad)

Book about single-phase current electric traction ("Using commercial-frequency single-phase current in railroad electrification" by A.S. Avatkov, Reviewed by V.E. Rozenfel'd, N.N. Sidorov). Zhel. dor.transp. 40 no.10:95-96 O '58. (MIRA 11:12)
(Railroads--Electrification) (Avatkov, A.S.)

STAROSKOL'SKIY, N.A., kand.tekhn.nauk; BAKHMUTSKIY, F.I., inzh.; ROZENFEL'D, V.Ye., prof., doktor tekhn.nauk

Mine haulage by means of contactless electric locomotives using higher frequency. Vest.elektroprom. 30 no.2:55-60 F '59. (MIRA 12:3)
(Electric locomotives) (Mine haulage)

L 18325-65 EWT(m)/EPF(m)-2/EWA(d)/EWP(t)/EWP(b) Pu-4/Pad IJP(c)/AFMDC/ASD(f)-2/
ASD(m)-3 MJW/JD/HW/JG/WB
ACCESSION NR: AR3010286 S/0081/63/000/012/0408/0409

SOURCE: RZh. Khimiya, Abs. 12K16

AUTHOR: Rozenfel'd, Y. L.; Maksimchuk, V. P.

TITLE: The passive state of stainless alloys in the presence of chlorine ions

CITED SOURCE: Tr. Vses. mezhvuz. nauchn. konferentsii po vopr. bor'by* a korroziyey. M., Gostoptekhizdat, 1962, 6-8

TOPIC TAGS: stainless steel, chlorine ion, passive state, chloride, chrome, iron, nickel, molybdenum

TRANSLATION: A method is proposed for investigating the stability of the passive state and quantitative evaluation of the tendency to pitting of stainless alloys in chloride solutions. From the frequency and the limits of the change in potential observed on the anode curves of the charge, it is possible to describe quantitatively the stability of the passive state and the tendency of alloys to pitting. According to electrochemical data, the stability of the passive state of alloys

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L 18325-65
ACCESSION NR: AR3010286

3

in chloride solutions increases in the following order: 1Kh18N9T < Kh18N12M2T < Kh18N12M3T. Actual observations of the behavior of the alloys under different conditions agree with results obtained by electrochemical methods. A systematic investigation of the stability of the passive state in stainless alloys of the Fe-Cr, Ni-Cr, Fe-Ni-Cr, and Fe-Ni-Cr-Mo systems in chloride solutions was carried out by electrochemical methods. Out of the basic components of the stainless alloys, in NaCl solutions in the presence of anodic polarization only Cr becomes stably passive. Fe is in an active state. The activation potentials for Ni and Mo are not large. In the systems Fe-Cr and Ni-Cr the capacity for passivation increases in proportion to increase of the Cr content in the alloys. Ni and particularly Mo, which by themselves are activated rather easily by chlorine ions, increase the stability of the passive state in stainless alloys thanks to a change in the structure of the alloys. The passivity producing properties of various anions were investigated. In their capacity to suppress the activating effect of chlorine ions in the case of Kh18N9T steel, the anions can be arranged in the following order: $NO_3^- > ClO_3^- > ClO_4^- > CrO_4^{2-} > SO_4^{2-}$. Contrary to existing opinion, the ion SO_4^{2-}

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ACCESSION NR: AR3010286

not only is not an activator, but has passifying properties and can completely suppress the activating effects of chlorine ions. There is no single valued relationship between the oxidizing capacity of the anions and their passifying properties. The passifying properties of sulfate ions are particularly strong in acid media. Adsorption of chlorine ions in the presence of different passifying agents was studied using tagged atoms (Cl^{36}). SO_4^{2-} and OH^- ions possess the ability to displace chlorine ions from the surface of the metal and to hinder the adsorption of the latter. As a result of such competitive adsorption, the surface concentration of the chlorine ions becomes so insignificant that they are not able to activate the metal. The data obtained are evidence of the adsorption mechanism in the activating effect of chlorine ions.

SUB CODE: MM ENCL: 00

Card 3/3

SOV/110-59-2-13/21

AUTHORS: Staroskol'skiy, N.A., Candidate of Technical Sciences, Bakhmutskiy, F.I., Engineer, [illegible], Rozenfel'd, V.Ye. Doctor of Technical Sciences, Professor

TITLE: Mine Haulage by Contactless High-Frequency Electric Locomotives (Rudnichnaya otkatka beskontaktnymi elektrovozami povyshennoy chastoty)

PERIODICAL: Vestnik Elektropromyshlennosti,1959,Nr 2,pp 55-60(USSR)

ABSTRACT: High-frequency contactless electric locomotives are likely to prove useful in mines where there is a risk of fire. This system employs inductive transfer of energy from the system to the moving locomotive, a schematic diagram of the arrangement being given in Fig 1. The power distribution system consists of two insulated cables suspended at a height of 1.7 metres. This system acts as a primary circuit, the secondary circuit being located on the locomotive. The current in the primary circuit is automatically maintained constant whatever the load on the locomotive. The main difficulty in developing contactless electric transport is that the electromagnetic linkage between primary and secondary is weak because closed magnetic circuits cannot be used. Conditions are best at high frequency, and the frequency

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Mine Haulage by Contactless High-Frequency Electric Locomotives

of 2,500 c/s has been used on an experimental installation with an electric locomotive of 15 - 20 kW. Even at 2500 c/s the inductive reactance of the section line is 22 - 23 ohms/km and, therefore, compensating capacitors must be installed at intervals of 500 - 600 metres along the line. The power receiver installed on the locomotive consists of a steel core and several turns of cables. The cables are of special construction to reduce skin effects. The inductive reactance of the power receiver is 15 - 20 ohms and it must accordingly be sectionalized. Considerable difficulties are experienced in designing traction motors for frequencies of 1000 c/s and more. However, dry type rectifiers operate satisfactorily at such frequencies and so direct current motors are recommended. A special feature of the conditions of operation is that the voltage varies very greatly with the load. A number of other constructional problems are described. The first contactless electric locomotive running at a frequency of 2500 c/s commenced operation in 1951 on an experimental surface narrow gauge line. An experimental installation 1.5 km long was installed in a mine in 1954.

Mine Haulage by Contactless High-Frequency Electric Locomotives

After the equipment had operated successfully for seven months it was dismantled as the convertor was required for further development work in the laboratory. A new experimental line with two locomotives has been operating in the same mine since early in 1958. A 100 kW high-frequency furnace type generator is used. The rest of the installation is briefly described. The maximum power of the locomotive depends on the conditions and ranges from 13 - 20 kW. The locomotives have been convenient to control and reliable in operation. There have been several cases of capacitor failure. Safety questions are then considered. The possibility of dangerous e.m.f.'s being induced in other conductors is considered and it is found that dangerous values are unlikely to occur. Interference with telephonic communications is not excessive. The electrical equipment on the locomotives and the line capacitors must, of course, be explosion-proof. Consideration is given to the selection of frequency and it is concluded that a frequency in the neighbourhood of 3000 c/s is best. Theoretical traction characteristics for a contactless locomotive weighing

8.5 tons at a frequency of 3000 c/s are given in Fig 3. It is considered that contactless locomotives will be useful when it is required to haul 350 - 400 tons of coal per day or more, and they become particularly attractive at rates of 1000 tons of coal per day. Figures are given for the overall efficiency of the system and these range from 14% at 400 tons of coal per day to 25% at 1750 tons of coal per day. Operating experience with nickel iron accumulators in mining locomotives shows that the mean efficiency of accumulator haulage is about 23%. This efficiency is reckoned only to the battery terminals and as rheostats are more used in battery locomotives their power consumption is some 10% higher than that of the corresponding contactless locomotive. The overall efficiency of the contactless system could be improved by the use of ionic frequency changers. A disadvantage of contactless locomotives is that they are somewhat higher than battery types, overhead wires are necessary and the construction is somewhat complicated. The power of the

Mine Haulage by Contactless High-Frequency Electric Locomotives

locomotives can be increased by about 20% if the selenium rectifiers are replaced by germanium. It is recommended to manufacture a series of experimental locomotives for installation in two or three mines.

Card 5/5

There are 3 figures and 2 Soviet references.

SUBMITTED: June 27, 1958

ROZENFEL'D, Ya.

Voltage limitation in the semiconductor rectifiers of a television receiver when power is turned on. Radio no.6:48 Je '62. (MIRA 15:5)

(Television--Receivers and reception)

ROZENFEL'D, Ya

Istoriya mashinostroyeniya SSSR, s pervoy poloviny XIX v. do nashikh dney (by) Ya. S. Rozenfel'd (i) K. I. Klimenko. Moskva, Izd-vo Akademii Nauk SSSR, 1961.

499 p. tables.

At head of t. -p.: Akademiya Nauk SSSR. Institut Ekonomiki.

Bibliographical footnotes.

KOROBEYNIKOV, P. (g. Ryazan'); ROZENFEL'D, Ya. (g. Odessa)

Repairing amateur television receivers. Radio no.6:[illegible]2 Je '61. (MIRA 14:10)

(Television—Receivers)

ROZENFEL'D, IA. S.

ROZENFEL'D. IA. S. Promyshlennaia politika SSSR (1917-1925); s pred. A.M. Ginzburga. Moskva, Planovoe khoziaistvo, 1926. 552 p. DLC: Unclass.
CSt-H

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

ROZENFEL'D, Ya.S., prof.; KLIMENKO, K.I., doktor ekonom.nauk; SHIRYAYEV, Yu.S., red.izd-va; DOROKHINA, I.N., tekhn.red.

[History of the machinery industry in the U.S.S.R.; from the first half of the 19th century to the present time] Istoriia mashinostroeniia SSSR; s pervoi poloviny XIX v. do nashikh dnei. Moskva, Izd-vo Akad.nauk SSSR, 1961. 499 p.

(MIRA 14:3)

(Machinery industry)

ROZENFEL'D, Ye.G., inzh.

Effectiveness of adding calcium chloride in steam-curing of concrete products. Bet.i zhel.-bet. no.1:37 Ja '60. (MIRA 13:5)

(Concrete--Curing) (Lime, Chloride of)

ROZENFELD, Ye F.

PA 246T14

USSR/Medicine - Gas Gangrene Feb 53

"Concerning the Rapid Detection of B. perfringens," A.M. Kalinin, Ye.F. Rosenfel'd, S.M. Lisyanskaya, Chair of Microbiol, State Order of Lenin Inst for Advanced Training of Physicians imeni S.M. Kirov, Leningrad

"Zhur Mikrobiol, Epidemiol, i Immunobiol" No 2, pp 59, 60

Describes detection of B. perfringens in various media both in the presence and absence of bacterial antagonists. Finds the use of peptone-milk medium (proposed in 1944 by A. M. Kalinin) of advantage for this diagnostic procedure.

246T14

ROZENFEL'D, Ye.G.; PLYSHEVSKAYA, Ye.G.

Characteristics of comples formation of liver glycogens with proteins in alloxan diabetes. Biokhimiia 20 no.2:205-211 Mr-Ap '55. (MLRA 8:8)

1. Laboratoriya fiziologicheskoy khimii i Institut biofiziki Akademii nauk SSSR, Moskva.

(LIVER, metabolism,
glycogen, combination with proteins in alloxan diabetes)
(PROTEINS, metabolism,
liver combination with glycogen in alloxan diabetes)
(GLYCOGEN, metabolism,
liver, combination with glycogen in alloxan diabetes)
(DIABETES, MELITUS, experimental,
liver glycogen combination with proteins in)

ROZENFEL'D, Ya.S., prof.

"Problems in developing the metallurgical industry of the northwest" by I.P. Bardin, A.E. Probst, V.V. Rikman. Reviewed by IA. S. Rozenfel'd. Vest. LGU 2 no.9:170-1175 S '47. (MIRA 12:9)

(Russia, Northwestern--Metal industries)
(Bardin, I.P.) (Probst, A.E.) (Rikman, V.V.)

ROZENFEL'D, Ye. I. Cand. Tech. Sci.

Dissertation: "Investigation of the Systems with Feedback and Their Dependence on the General Properties of Quadripoles." Moscow Order of Lenin Power Engineering Inst imeni V. M. Molotov, 1[illegible] Oct 47.

SO: Vechernyaya Moskva, Oct, 1947 (Project #17836)

ROZENFEL'D, Ye.I., kandidat tekhnicheskikh nauk; GUREVICH, S.S., inzhener, mladshiy nauchnyy sotrudnik.

Filtering out harmonics in short wave transmitters. Vest.sviazi 14 no.2:3-6 F '54. (MLRA 7:5)

1. Nachal'nik laboratorii NII Ministerstva svyazi (for Rozenfel'd).
(Radio, Short-wave--Transmitters and transmission)

ROZENFEL'D, Yefim Isaakovich; LOKSHIN, A.M., otvetstvennyy redaktor; VERKHOVINA, T.M., redaktor; VEYNTRAUB, A.B., tekhnicheskiy redaktor

[Filtration of harmonics in shortwave transmitters] Fil'tratsiia garmonik korotkovolnovykh peredatchikov. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1956. 42 p. (MLRA 9:11)
(Radio filters)

ACC NR: AP6021812 SOURCE CODE: UR/0413/66/000/012/0090/0091

INVENTOR: Zel'tsman, P. A.; Rozenfel'd, Ye. I.; Rudenko, N. A.; Yurovitskiy, L. N.

ORG: None

TITLE: A clamping device for geophysical borehole instruments. Class 42, No. 182902 [announced by the Special Design Office for Geophysical Instrument Building, Glavgeologiya UkrSSR (Osoboye konstruktroskoye byuro geofizicheskogo priborostroyeniya Glavgeologii UkrSSR)]

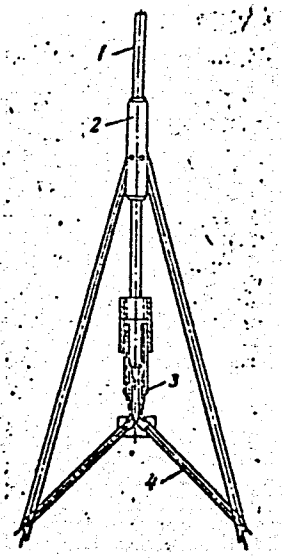
SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 12, 1966, 90-91

TOPIC TAGS: geophysic instrument, mechanical fastener

ABSTRACT: This Author's Certificate introduces a clamping device for geophysical borehole instruments. The unit consists of a housing, a movable sliding coupler and a hinged lever system. The installation is designed for simplified construction, high quality and increased working capacity in small-diameter wells. Flat leaf springs are fastened to the housing or to the sliding coupling , and the free ends of these springs are used to load the brace levers.

Card 1/2 UDC: 550.839:622

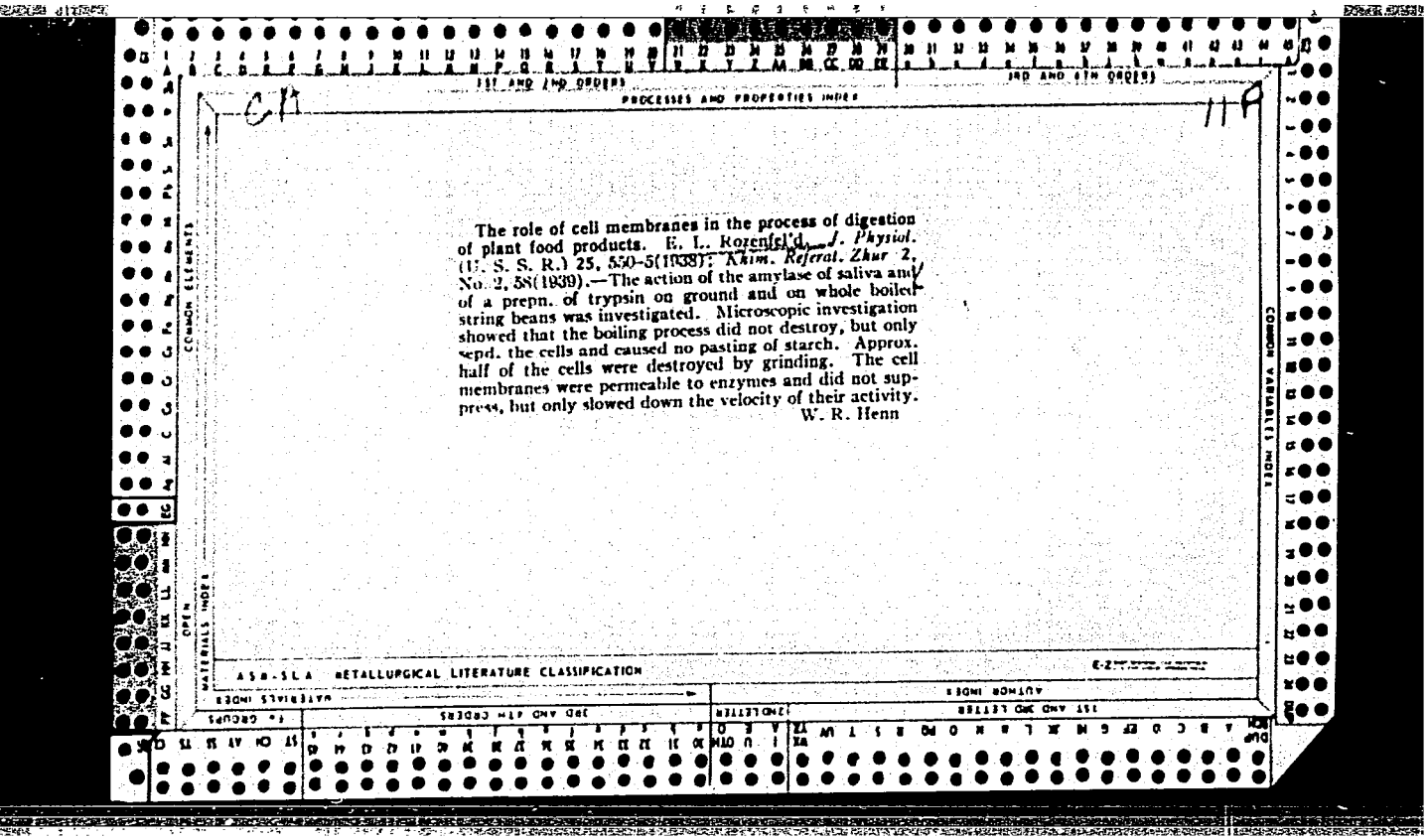
ACC NR: AP6021812



1—housing; 2—coupling; 3—spring; 4—bracing levers

SUB CODE: 08, 14/ SUBM DATE: 02Jul64

Card 2/2

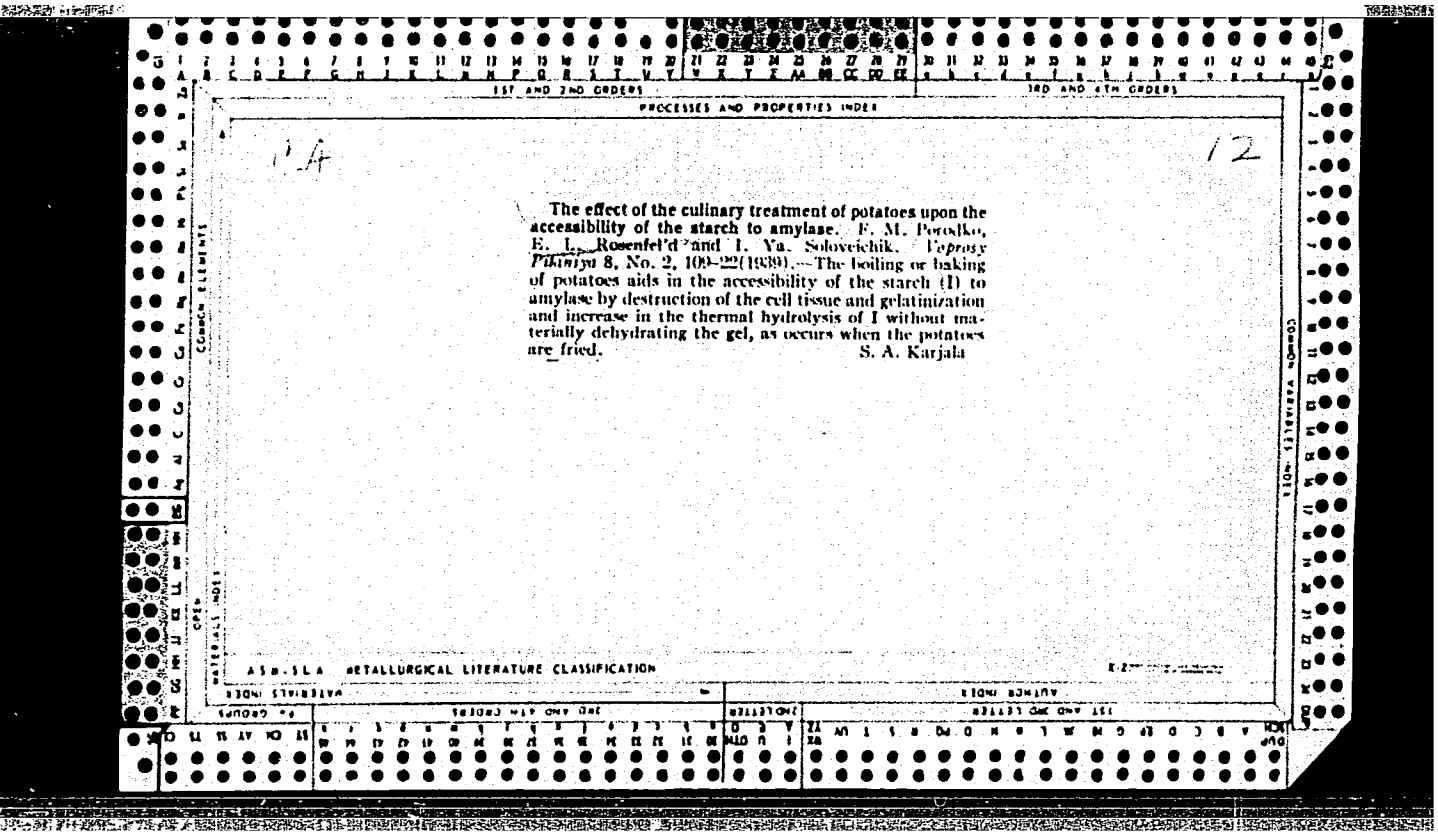


PROCESSES AND PROPERTIES INDEX

The role of cell membranes in the process of digestion of plant food products. E. L. Rozenfel'd. *J. Physiol.* (U. S. S. R.) 25, 550–5(1938); *Khim. Referat. Zhur* 2, No. 2, 58(1939).—The action of the amylase of saliva and of a prepn. of trypsin on ground and on whole boiled string beans was investigated. Microscopic investigation showed that the boiling process did not destroy, but only sepd. the cells and caused no pasting of starch. Approx. half of the cells were destroyed by grinding. The cell membranes were permeable to enzymes and did not suppress, but only slowed down the velocity of their activity.

W. R. Henn

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



PROCESSES AND PROPERTIES INDEX

1A

12

The effect of the culinary treatment of potatoes upon the accessibility of the starch to amylase. F. M. Perelko, E. L. Rosenfel'd and I. Ya. Soloveichik. *Veprosy Pitaniya* 8, No. 2, 109–22(1939).—The boiling or baking of potatoes aids in the accessibility of the starch (I) to amylase by destruction of the cell tissue and gelatinization and increase in the thermal hydrolysis of I without materially dehydrating the gel, as occurs when the potatoes are fried.
S. A. Karjala

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS 3RD AND 4TH ORDERS

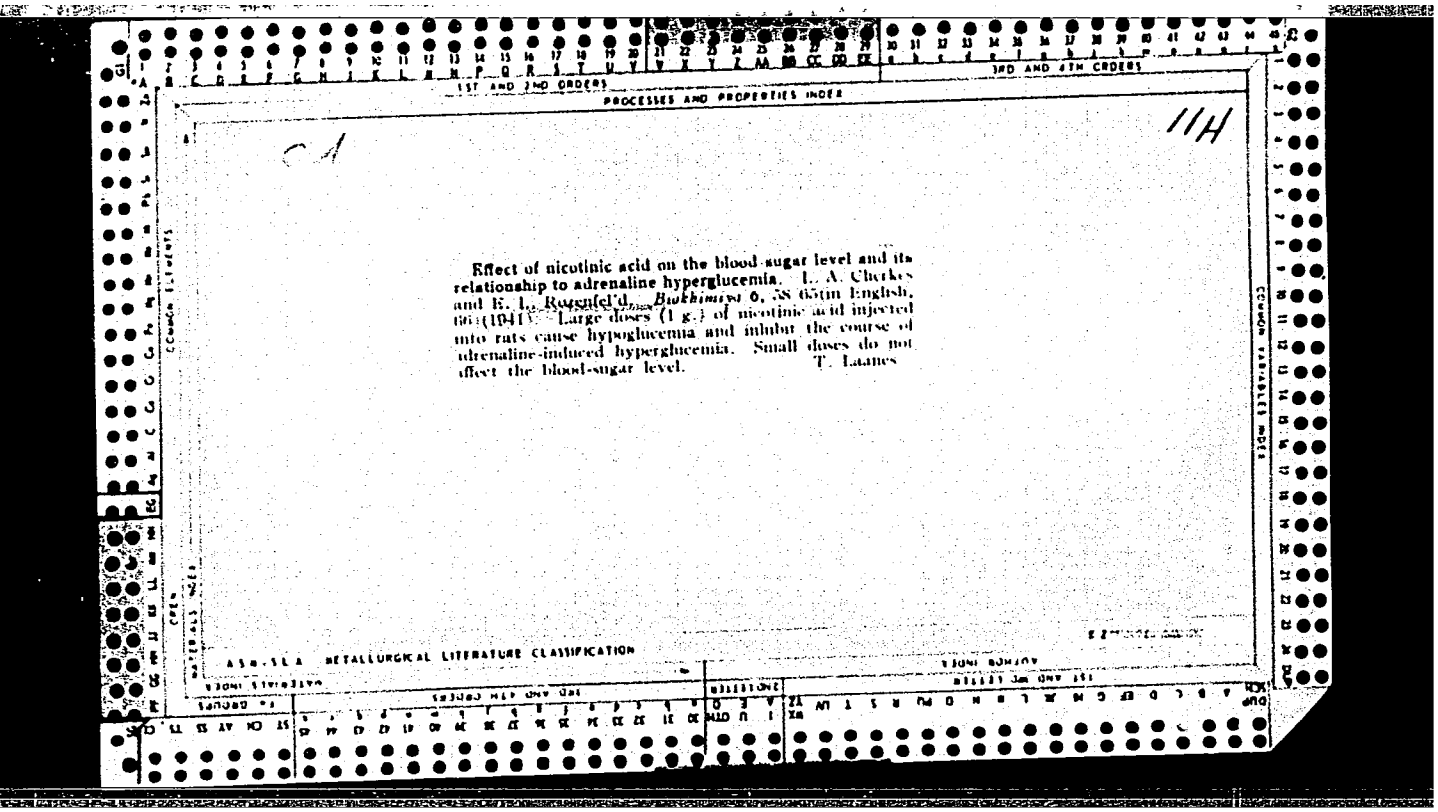
PROCESSES AND PROPERTIES INDEX

BC

A-4

Lipin metabolism in preserved semen. T. P. [illegible] and E. L. Rosenfeld (J. Med. Ukraine, 1940, [illegible]).— Lipin concn. in the semen remained stable during the first 10 days of preservation at [illegible]°; on the 14th day it fell to one third of its original val. A marked increase of ketonic compounds was observed from the 8th day onwards ([illegible]% on the 14th day). Cholesterol diminished gradually to less than half on the 14th day. M. K.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



ROZENFEL'D, Ye. L.

Jul/Aug 48

USSR/Medicine - Albumin
Medicine - Glycogen

"The Problem of the Existence of Various Glycogens and Their Albumin Compounds," Ye. L. Rozenfel'd, Physiol Chem Lab, Acad Sci USSR, Moscow, 4 pp

"Biokhimiya" Vol XIII, No 4

Glycogens exist in tissue, extractable with both ease and with difficulty. Thus, the not easily extractable fraction of rabbit-liver glycogen is greater after the rabbits have starved 2 to 3 days. The amount of glycogen which is difficult to extract decreases in winter and increases in spring in the

12/49T78

[redacted]

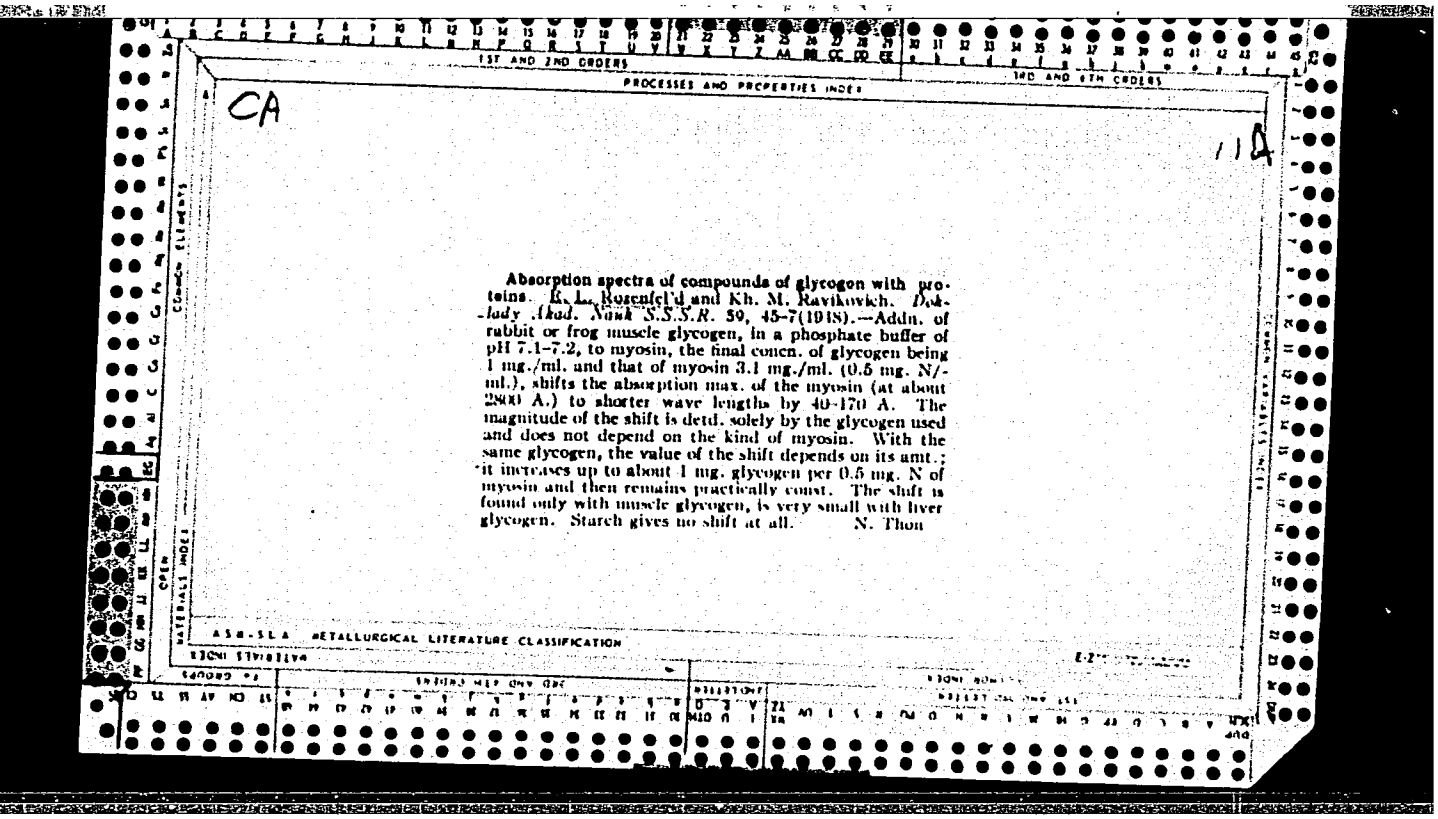
USSR/Medicine - Albumin (Contd) Jul/Aug 48

frog liver. Muscle glycogen forms a compound with the muscle protein, myosin, as is shown by a study of ultraviolet absorption. Submitted 2 Oct 48.

PA 12/49T78

12/49T78

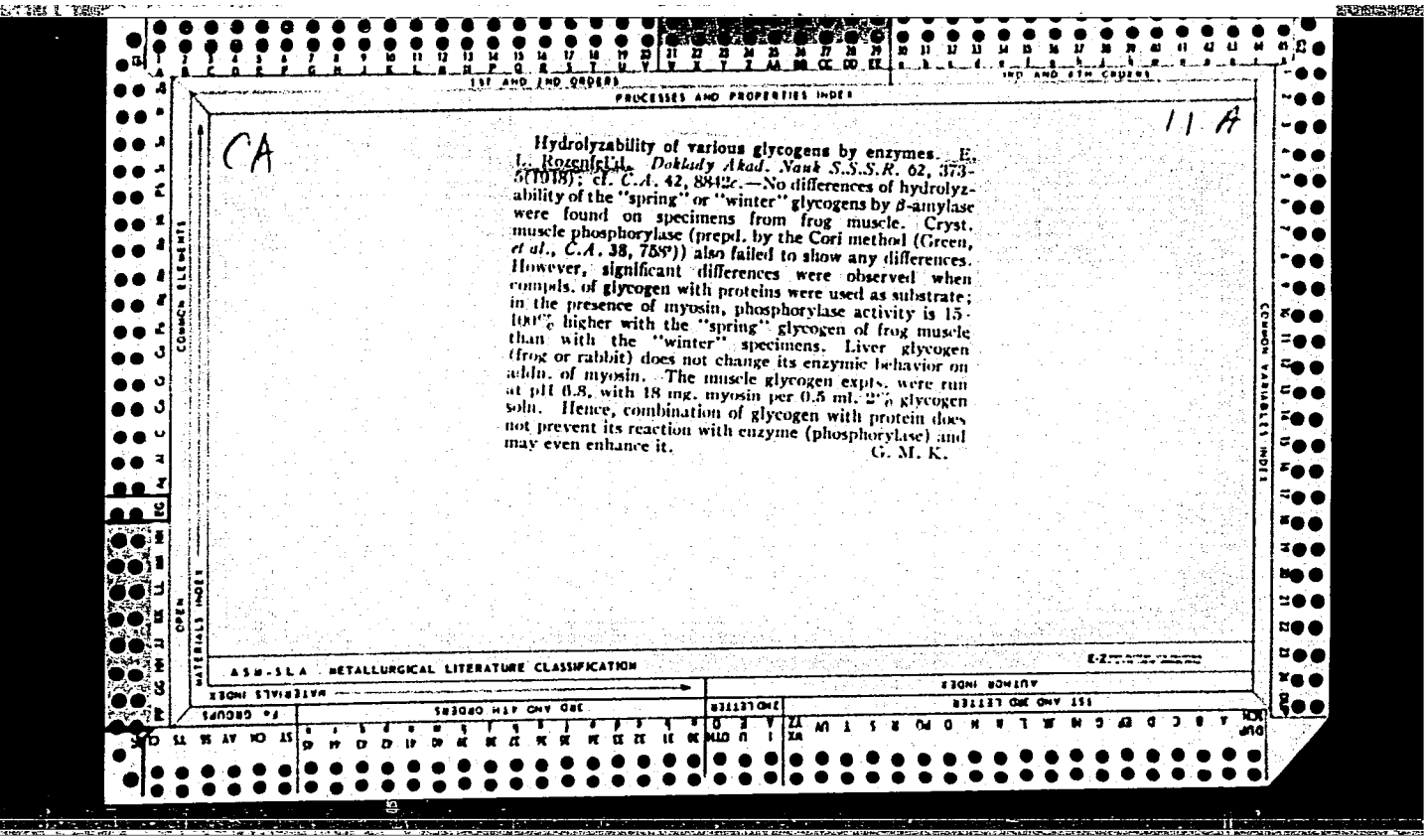
[redacted]



CA

11A

Absorption spectra of compounds of glycogen with proteins. L. L. Rozenfel'd and Kh. M. Ravikovich. *Doklady Akad. Nauk S.S.S.R.* 59, 45–7(1918).—Addn. of rabbit or frog muscle glycogen, in a phosphate buffer of pH 7.1–7.2, to myosin, the final concn. of glycogen being 1 mg./ml. and that of myosin 3.1 mg./ml. (0.5 mg. N/ml.), shifts the absorption max. of the myosin (at about 2800 A.) to shorter wave lengths by 40–170 A. The magnitude of the shift is detd. solely by the glycogen used and does not depend on the kind of myosin. With the same glycogen, the value of the shift depends on its amt.; it increases up to about 1 mg. glycogen per 0.5 mg. N of myosin and then remains practically const. The shift is found only with muscle glycogen, is very small with liver glycogen. Starch gives no shift at all. N. Thon



PROCESSES AND PROPERTIES INDEX

CA

11 A

Hydrolyzability of various glycogens by enzymes. E. L. Rozenfel'd. *Doklady Akad. Nauk S.S.S.R.* 62, 373-5(1918); cf. *C.A.* 42, 8842c.—No differences of hydrolyzability of the "spring" or "winter" glycogens by β-amylase were found on specimens from frog muscle. Cryst. muscle phosphorylase (prepd. by the Cori method (Green, *et al.*, *C.A.* 38, 789)) also failed to show any differences. However, significant differences were observed when compds. of glycogen with proteins were used as substrate; in the presence of myosin, phosphorylase activity is 15-100% higher with the "spring" glycogen of frog muscle than with the "winter" specimens. Liver glycogen (frog or rabbit) does not change its enzymic behavior on addn. of myosin. The muscle glycogen expts. were run at pH 6.8, with 18 mg. myosin per 0.5 ml. 2% glycogen soln. Hence, combination of glycogen with protein does not prevent its reaction with enzyme (phosphorylase) and may even enhance it. G. M. K.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

ROZENFEL'D, YE. L.

PA 36/49T58

USSR/Medicine - Enzymes
Medicine - Glycogens

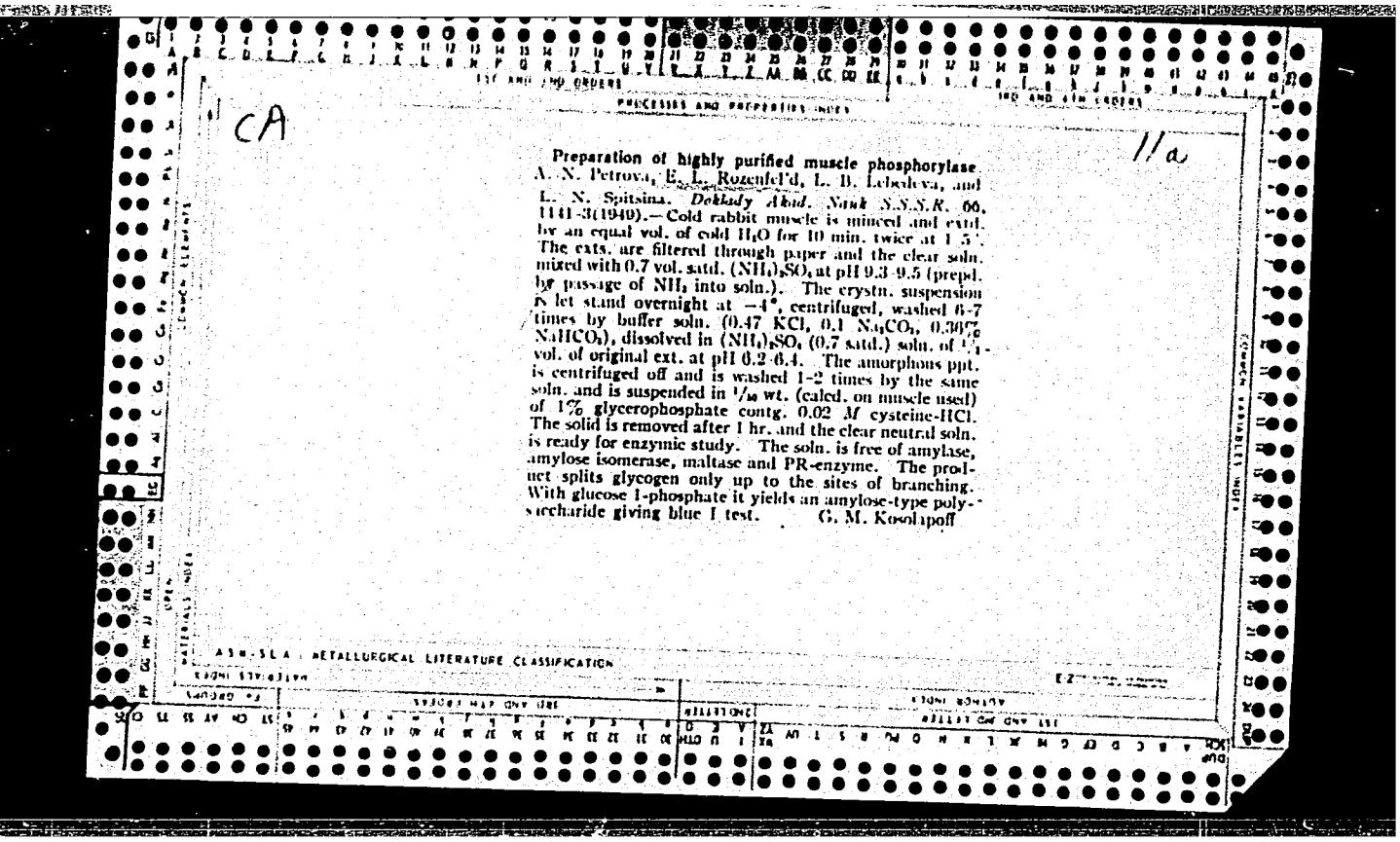
Sep 48

"Conditions Necessary for the Splitting of Various Glycogens by Ferments," Ye. L. Rozenfel'd, Lab of Physiol Chem, Acad Sci USSR, 3 pp

"Dok Ak Nauk SSSR" Vol LXII, No 3

Discusses action of phosphorylase on a compound of glycogens with protein (myosin). Tables show resolvability of "spring" and "winter" glycogens of frogs by beta-amylase, resolvability of liver glycogens in presence and absence of myosin, and phosphorylation of glycogen from frog muscles. Submitted by Acad Ya. O. Parnas, 5 Jul 48.

36/49T58



CA

11a

Preparation of highly purified muscle phosphorylase. A. N. Petrova, E. L. Rozenfel'd, L. B. Lebedeva, and L. N. Spitsina. *Doklady Akad. Nauk S.S.S.R.* 66, 1141-3(1949).—Cold rabbit muscle is minced and extd. by an equal vol. of cold H_2O for 10 min. twice at 1.5°. The exts. are filtered through paper and the clear soln. mixed with 0.7 vol. satd. $(NH_4)_2SO_4$ at pH 9.3-9.5 (prepd. by passage of NH_3 into soln.). The crystn. suspension is let stand overnight at −4°, centrifuged, washed 6-7 times by buffer soln. (0.47 KCl, 0.1 Na_2CO_3, 0.30% $NaHCO_3$), dissolved in $(NH_4)_2SO_4$ (0.7 satd.) soln. of ½ vol. of original ext. at pH 6.2-6.4. The amorphous ppt. is centrifuged off and is washed 1-2 times by the same soln. and is suspended in 1/10 wt. (calcd. on muscle used) of 1% glycerophosphate contg. 0.02 *M* cysteine-HCl. The solid is removed after 1 hr. and the clear neutral soln. is ready for enzymic study. The soln. is free of amylase, amylose isomerase, maltase and PR-enzyme. The product splits glycogen only up to the sites of branching. With glucose 1-phosphate it yields an amylose-type polysaccharide giving blue I test. G. M. Kosolapoff

CA

113

The effect of alkaline treatment of glycogens on their in vitro complex formation with proteins. R. L. Rozenfel'd. *Doklady Akad. Nauk S.S.S.R.* **68**, 1073-4(1949); cf. *C.A.* **42**, 8842c.—Treatment of rabbit muscle glycogen for 3 hrs. with boiling 30% KOH yields a product which does not give a shift of abs. max. of myosin whereas untreated glycogen gives a 90-A. shift toward shorter waves. Thus, alkali treatment prevents complex formation with the protein. Similarly the cleavage of treated glycogen by phosphorylase is unchanged by addn. of myosin, while untreated glycogen shows much more rapid cleavage in the presence of myosin. The nature of alkali-induced change is not clear. G. M. Kosolapoff

C A

113

The decomposition of different glycogens by enzymes in the presence of proteins. E. L. Rozenfel'd (Acad. Sci., Moscow). *Biokhimiya* 15, 272-6(1950); cf. *C.A.* 42, 5932*d*, 8842*e*.—The action of α-amylase and phosphorylase on muscle glycogens in the presence of the muscle proteins myosin and myogen was studied. β-Amylase was not used, since its optimum action is at a pH of 4.8-5.0, where the muscle proteins are denatured and coagulated. Phosphorolysis proceeded more rapidly with the glycogen-protein complexes. In the absence of proteins, different glycogens possessed the same rate of phosphorolysis. When the different glycogens formed complexes with proteins, as shown by the different absorption spectra in the ultraviolet, the phosphorolysis rate differed. This effect was observed in comparing the decompn. of frog "spring" and "winter" glycogens, and of normal and denervated dog muscle glycogens. Myosin and myogen were without effect on the enzymic rate of amylolysis of glycogen by α-amylase. The glycogen which had been treated with 30% KOH no longer formed a complex with proteins (no change in the absorption spectra was observed). Myosin was without effect on the rate of phosphorolysis of such a modified glycogen. H. Priestley

C. 4.

11 A

Action of highly purified muscle phosphorylase. A. N. Petrova and L. L. Rozen[el']d (Lab. Physiol. Chem., Acad. Sci., Moscow). *Biokhimiya* 15, 309-15(1950); cf. *C.A.* 43, 5438*a*, 7086*i*.—Repeated attempts to obtain cryst. phosphorylase by Cori's method (*C.A.* 38, 758[9]) failed. On following the exact directions of the Cori method, phosphorylase *a* was usually obtained, but in the amorphous condition, mixed with amylase and amylose isomerase. A muscle phosphorylase, free from traces of other carbohydrases and the PR-enzyme was prepd. as follows: The clear aq. ext. of rabbit muscle (2 extns. of muscle for 10 min. at 1-5° with an equal vol. of distd. water) was treated with 0.7 vol. of a satd. $(NH_4)_2SO_4$ soln. of pH 9.3-9.5 (adjusted with gaseous NH_3). After 15-20 min., a cryst. ppt. contg. phosphorylase formed. This was allowed to stand overnight at 4-6°. The ppt. was sepd. by centrifugation, and washed 6-7 times with a cold buffer soln. contg. 0.47% KCl, 0.1% Na_2CO_3, and 0.36% $NaHCO_3$. The cryst. ppt. was dissolved in 0.33 vol. (based on original aq. muscle ext.) $(NH_4)_2SO_4$ soln. of 70% satn., at a pH of 6.2-6.4 (with NH_4OH). The enzyme, along with some protein impurities, then pptd. The ppt. was sepd. by centrifugation and treated with a soln. of 1% glycerophosphate mixed with 0.2 *M* cysteine-HCl. The vol. was 2% of the initial muscle. The phosphorylase dissolved. The insol. part was discarded. The completely colorless clear ext., of neutral reaction, was used for the enzymic tests. The carbohydrate synthesized by this phosphorylase *in vitro* had the properties of an amylose. It gave a blue-green coloration with I, and was completely hydrolyzed by *β*-amylase. When a mixt. of phosphorylase and amylose isomerase was employed, a polysaccharide of the glycogen type was obtained, which gave a yellow-brown coloration with I, and 40% of it was decompd. by *β*-amylase. The purified muscle phosphorylase hydrolyzed glycogen to the dextrin stage and no further. Expts. with the highly purified phosphorylase confirmed the increased rate of phosphorolysis (but not synthesis) of glycogen in the presence of myosin (*C.A.* 43, 2252*b*).

H. Priestley

ROZENFELD E. L. AND PANCHENKO O. N.

3994. Rozenfeld E.L. and Panchenko O. N. Participation of the aldehyde group of glycogen molecule in the formation of glycogen-protein complex Doklady Akad. Nauk-S.S.S.R. 1950, 73 (993-996)

In order to investigate the possible participation of the -CHO group of glycogen in protein complexing, glycogen was treated with hypoiodite (I and NaOh solutions until decolorization occurred, followed by 45 min. at 27-30 and dialysis for 24 hr.) which reduced the reducing capacity of the substance either to zero or to a very low value. A subsequent cleavage by phosphorylase in presence of myosin proceeded more rapidly than with untreated glycogen; thus oxidation of the -CHO group to $-CO_2H$ did not prevent its interaction with the protein which affects the rate of cleavage by the enzyme. If the glycogen is pretreated with alkali so that the capacity to form protein complexes is lost and the oxidation is done with such a product, the results are similar to the above and myosin-phosphorylase treatment gives a more rapid cleavage than that observed in unoxidized specimens. The results support the idea that protein-glycogen complex forms by the way of the -CHO group in a glucose unit of glycogen. Kosolapoff (Chemical Abstracts)

SO. Excerpta Medica Section II Volume 4 Number 8

Transformation of muscle phosphorylase b into phosphorylase a. E. L. Rozenfel'd and A. N. Petrova. *Doklady Akad. Nauk S.S.S.R.* 74, 545–7(1950).—Transformation of phosphorylase b into a occurs in alk. medium; thus autolyzed muscle exts. containing phosphorylase b, activated by adenylic acid, upon adjustment of pH to 8.5–8.7 reveal properties of a form, which is activated by cysteine. The effect is very pronounced after 22 days' storage in a refrigerator, when almost all b activity was transformed into a activity.
G. M. Kosolapoff

STEPANENKO, B.N.: PETROVA, A.N.; ROZENFEL'D, E.L.

Recent data on glycogen and its biologic transformations. Izv. Akad.nauk SSSR.Ser.biol.,Moskva No.1:89-106 Jan-Feb 51.
(CLML 20:5)

1. Laboratory of Physiological Chemistry of the Academy of Sciences USSR. 2. Presented by Academician A.I.Oparin.

USSR/Biology (Agriculture) - Starch From Sep/Oct 51
Potatoes

"Starch and Its Formation in Potatoes," B. N. Stepanenko, Ye. L. Rosenfel'd, A. N. Petrova, A. V. Kotel'nikova, Moscow

"Uspekh Sovrem Biol" Vol XXXII, No 5, pp 193-231

Potatoes are a very important crop in the USSR; 7.7 million hectares were planted under potatoes before World War II and the acreage was 5% higher in 1950. Yield from 1 hectare corresponds to 1,600 liters of alc, which may serve as raw material for synthetic rubber. While yields were raised by 21% during the past 10 yrs, the starch content is often inadequate.

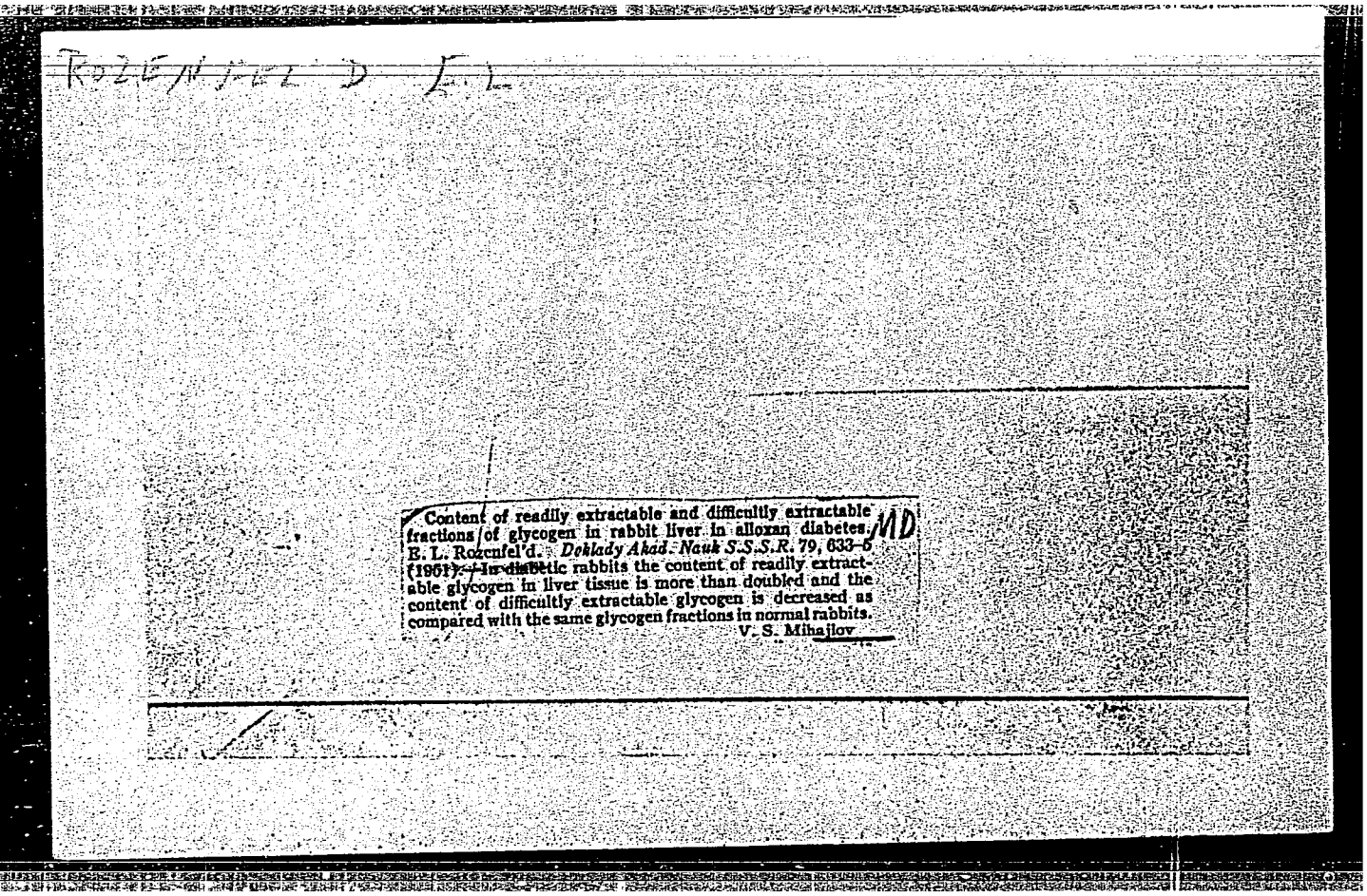
198T1

USSR/ Biology (Agriculture) - Starch From Sep/Oct 51
Potatoes (Contd)

A number of interesting investigations on starch formation in potatoes was carried out at the (Inst of Biochem imeni Bakh, Acad Sci USSR.) This work and other data will help in raising the starch content. Reviews in detail the present status of the problem of phytochem starch formation.

198T1

ROSENFEL'D, YE. L.



ROZENFEL'D L. L.

Content of readily extractable and difficultly extractable fractions of glycogen in rabbit liver in alloxan diabetes. MD
B. L. Rozenfel'd. *Doklady Akad. Nauk S.S.S.R.* 79, 633–6 (1951).—In diabetic rabbits the content of readily extractable glycogen in liver tissue is more than doubled and the content of difficultly extractable glycogen is decreased as compared with the same glycogen fractions in normal rabbits.
V. S. Mihajlov

[illegible], Ye. L.

[illegible]D, Ye. L. -- "On the Existence of Various Glycogens and Their Compounds With Proteins." Sub 28 Feb 52, Inst of Biochemistry imeni A. N. Bakh, Acad Sci USSR. (Dissertation for the Degree of Doctor in Biological Sciences).

So: Vechernaya Moskva January-December 1952

PETROVA, A.N.;ROZENFEL'D, Ye.L.

Phosphorylase in muscles and its properties. Izv. Akad. nauk SSSR. Ser. biol. no.4:133-138 July-Aug 1952. (CIML 23:2)

1. Laboratory of Physiological Chemistry, Academy of Sciences USSR.

CA ROZENFEL'D Ye. L.

11-A

Significance of aldehyde groups in the glycogen molecule. E. L. Rozenfel'd and O. N. Panchenko (Acad. Sci., Moscow). *Biokhimiya* 17, 214–21(1952).—The aldehyde groups in glycogen were detd. by incubating, at 20° for 45 min., 30–50 mg. of glycogen, 2 ml. of 0.005 *M* I, and 0.5 ml. of 0.1 *N* NaOH. After treatment with 0.2 ml. of 5 *N* H_2SO_4, the unused I was titrated with 0.005 *N* $Na_2S_2O_3$. Different glycogens vary in their reducing capacities. Muscle glycogen required 0.3–0.7 mg. I per 100 mg. substance, whereas liver glycogen required 1.1–2.5 mg. I. This agrees with the view that the mol. wt. of liver glycogen is higher than that of muscle glycogen. Treatment of glycogen (prepd. by extn. with CCl_3CO_2H) with concd. NaOH did not lower its reducing capacity. The aldehyde groups of glycogen were therefore not destroyed by alkali. The conversion of the CHO to the CO_2H group hastened the phosphorolytic decompn. of glycogen in the presence of proteins. H. Priestley

Biological - Chemistry A
General - 11

CA

The role of the structure of glycogen molecules in the process of formation of glycogen-protein complexes. E. L. Roggufel'd and E. G. Plyshevskaya. *Doklady Akad. Nauk S.S.S.R.* 85, 615-18(1952); cf. *C.A.* 46, 7661h.—Under the action of phosphorylase that incompletely cleaves glucose residues from terminal branches of the glycogen mol., the glycogen loses the ability to react with proteins. Hence, the formation of glycogen-protein complexes depends on terminal, nonaldehydic groups as well as on the hemiacetal hydroxyls (potential aldehydic groups). The above concept is supported by expts. in which β-dextrins were obtained by the action of β-amylase on glycogen of frog or rabbit muscle. For complete cleavage of the terminal chains up to the sites of chain branching repeated treatment with the enzyme was needed in some cases. The protein used was myosin whose absorption max. is 2775 A. The absorption max. of β-dextrin mixts. with myosin corresponded in full with those of myosin alone; the complex of myosin with glycogen has an absorption max. at 2625 A. Dextrins formed from glycogen by the action of phosphorylase differ from β-dextrins by residual terminal glucose groups; such φ-dextrins, prepd. by incubation of glycogen in phosphate buffer (pH 6.8–7.0) in presence of neutralized cysteine-HCl and purified phosphorylase for a total of 48 hrs., also fail to show spectral evidence of any combination with myosin.

G. M. Kosolapoff

PLYSHEVSKAYA, YE. G.; ROZENFEL'D YE. L.; GACHK[illegible], [illegible]

Dextrines

Interaction between proteins and - dextrines with varying length of terminal molecular branches. Dokl. AN SSSR 86, no. 1, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952, UNCLASSIFIED

1. BOLOTINA, T. T.; ROZENFEL'D, Ye. L.

2. USSR (600)

4. Cataphoresis

7. Electrophoretic radiation of glycogen-albumin complexes, Dokl. AN SSSR, 87, No. 4, 1952.

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

ROZENFEL'D, E.L.; PLYSHEVSKAYA, E.G.

Investigation of the qualitative peculiarities of rabbit muscle glycones during alloxan diabetes. Biokhimiya 18, 51-5 '53.(MLRA 6:1) (CA 47 no.15:7640 '53)

1. Lab. Physiol.Chem., Acad.Sci., U.S.S.R., Moscow.

ROZENFEL'D, E.L.

Nature of various glycogens and their combination with proteins. Usp. sovrem. biol 36 no.2:179-194 Sept-Oct 1953. (CLML 25:5)

1. Moscow.

Rozenfel'd, E.L.

The effect of structure of different polysaccharides of vegetable and animal origin on their capacity to form complexes with proteins. B. L. Rozenfel'd and E. G. Plyshevskaya (Lab. Physiol. Chem. and Inst. Biophys. Acad. Sci. U.S.S.R., Moscow). *Biokhimiya* 19, 101-6(1954).—Polysaccharides whose mol. structure is a long nonbranching chain of the glucopyranose or fructofuranose type and polysaccharides of the type of β- and φ-dextrins form no complexes with proteins. Glycogens, amylopectins, α-dextrins, and dextrins can enter into complex formation with proteins. Myosin is not susceptible to polysaccharide complex formation. The fibrillar proteins enter into polysaccharide complex formation more readily than the globular proteins. The max. absorption of all such polysaccharides is λ 2050 A., and is independent of the type of carbohydrate or protein constituting the complex.
B. S. Levine

ROZENFEL'D, E.L.

Phosphorylase of potato tubers. E. L. Rozenfel'd and A. I. Shubina (Lab. Physiol. Chem., Acad. Sci. U.S.S.R., Moscow). *Biokhimiya* 16, 250-91(1951).—Phosphorylase activity is lower in young potato tubers than in fully matured, in which the starch content is higher. Potato tubers grown under different conditions of agriculture show no noteworthy differences in their starch content nor in the phosphorylase activity. The latter is lower in young tubers of the late (Vol'tman) variety than in the early (Priskul'skii and Oktyabrenok) varieties of corresponding age. As the tubers ripen such differences disappear. D. S. Leving (1)

ROZENFEL'D, YE. L.

Reaction of various proteins with glycogen. E. G. Plyshevskaya and E. L. Rozenfel'd. *Doklady Akad. Nauk S.S.S.R.* 94, 1[redacted], 5932*d*; 43, 2252*b*; 47, 6461*h*.—Exptl. results obtained with various proteins indicate the widely distributed ability to form complexes with polysaccharides. The complexes have absorption max. 2600–2650 A. in all cases. The degree of binding varies and depends on structural peculiarities of the various protein mols. Thus, glycogen forms such complexes with myosin, fibrinogen, edestin, and egg albumin. Absorption spectra of these are shown. G. M. Kosolapoff

ROZENFEL'D, E. L.

Some peculiarities of dextran and its interaction with blood proteins. E. L. Rozenfel'd and E. G. Plyshevskaya. *Doklady Akad. Nauk S.S.S.R.* 95, 333–6(1954); cf. *C.A.* 46, 11268h.—Dextran is a branched polysaccharide produced from sucrose with the aid of *Leuconostoc mesenteroides* and contains 1,6-bound glucose units, with branching at 1,4-positions. Tests with dextran soln. in 0.9% NaCl were made in respect to its complexing with proteins which may be of importance in the application of dextran as a blood substitute. The binding was followed spectrographically. Although complexing with fibrinogen, serum albumin, γ-globulin, and myosin was observed, this phenomenon is much weaker than is observed with polysaccharides of the glycogen type. At 6% concn. dextran shows no effect on the spectrum of myosin and only at concn. of 25 mg./l. does the complex appear as shown by abs. max. 2650 A.; only those groups are bound which contribute to absorption in the longer wave end of the spectrum, and almost all groups of the protein are bound finally only with dextran concn. reaching 40 mg./l. Fibrinogen shows the greatest complexing ability with dextran of the various blood proteins. In view of the use of high concns. of dextran in blood substitute work the protein interaction should be considered and studied further. G. M. Kosolapoff

Translation M-188, 16 Feb 55

BACIU, I.,; ROSENFELD, E.,; MARCUTIU, V.

Serum protein fractions in anaphylaxis and antianaphylaxis.
Bul stiint., sect. med. 7 no.4:1319-1338 Oct-Dec 55.

1. Comunicare prezentata dr Gr. Benetato, membr u corespondent al Academiei R.P.R.,in sedinta Filialei Cluj a Academiei R.P.R., din 8 Februarie 1955 Catedra de fiziopatologie a Institutliu medico-farmaceutic Cluj si Sectia de cercetari medicale a Filialei Cluj a Academiei R.P.R.

(BLOOD PROTEINS
eff. of anaphylaxis & antianaphylaxis, in guinea pigs)
(ALLERGY, experimental
anaphylaxis & antianaphylaxis, eff. on blood proteins)

ROZENFEL'D, E.L.

MD
(1)

USSR

The characteristics of liver glycogen and protein complex formation in alloxan diabetes. E. L. Rozenfel'd and E. G. Plyshevskaya (Inst. Biophys., Acad. Sci. U.S.S.R., Moscow). *Biokhimiya* 20, 205-11(1955).—Investigational procedures were the same as described elsewhere (*C.A.* 47, 7040*i*). Alloxan diabetes enhances the property of glycogen of rabbit liver to form complexes with proteins. Insulin therapy reconstitutes the property of muscle glycogen to form complexes with proteins which is adversely affected by alloxan diabetes. Similar therapy has no effect on the ability of liver glycogen to form complexes with proteins. The constitution of the liver glycogen fractions extracted with difficulty in alloxan diabetes is not affected by insulin therapy. B. S. Levine