

LARIONOVA, Ye. . ., kand.ekonom.nauk; LEVIN, L.R. . . . kand.ekonom.nauk; BERLINER,
G.Sh. (Tashkent); BELEN'KIY, M.N., kan .ekonom.nauk (Tashkent);
PERTSEV, V.G., kand.ekonom.nauk (Tashkent)

Book on transportation finances. Reviewed by E.V.Larionova and
others. Zhel.dor.transp. 46 no.6:93-96 Je '64.

(MIRA 18:1)

1. Nachal'nik finansovoy sluzhby Sredneaz'atskoy dorogi (for
Berliner).

BELEN'KIY, Mark Naumovich; LARINA, Mariya Nikolayevna; FAVLOVICH,
Yevgeniy Stanislavovich; PAVLOVSKIY, Sergey Sergeyeovich;
RASTORGUYEV, Aleksey Iosifovich; KOLTUNOVA, M.P., red.

[Technical, industrial and financial plan and analysis of
the work of locomotive and car repair plants] Tekhpromfin-
plan i analiz deiatel'nosti lokomotivo-vagonoremontnykh
zavodov. [By] M.N.Belen'kii i dr. Moskva, Transport,
1964. 253 p. (MIRA 17:9)

BELEN'KIY. Mark Naumovich; KOLTUNOVA, M.P., red.

[Economics of railroad passenger transportation] Ekono-
mika zheleznodorozhnykh passazhirskikh perevozok. Mo-
skva, Transport, 1965. 275 p. (MIRA 18:5)

KURKUDYM, F.Ye.; KARAYEV, R.G.; BELEN'KIY, M.S.; ZAVALI, L.A.; KOVALEVA, M.T.;
SOVETOV, V.N.; SOKOLOV, A.V.; SHUKHTINA, I.A.

Professor V.V.Guk on his 70th birthday. Vop. kur., fizioter. i lech.
fiz. kul't. 25 no.2:184-185 Mr-Apr '60. (MIRA 13:9)
(GUK, VADIM VASIL'EVICH, 1889-)

BELEN'KIY, M.S.; ZAREMBO, L.S. (Odessa)

Antitoxic function of the liver in patients with infectious nonspecific polyarthrititis. Vrach. delo no.11:128-129 N '61. (MIRA 14:11)

1. Revmatologicheskaya klinika (zav. - M.S.Belen'kiy) Ukrainskogo instituta kurortologii i fizioterapii.
(ARTHRITIS) (LIVER--DISEASES)

BELEN'KIY, M.S.

"Health resorts of Moldavia" by V.IA.Negresku. Reviewed by M.S.
Belen'ki. Zdravookhranenie 5 no.4:57-59 J1-Ag '62. (MIRA 15:9)

1. Zaveduyushchiy revmatologicheskoy klinikoy Ukrainskogo nauchno-
issledovatel'skogo instituta kurortologii i fizioterapii.
(MOLDAVIA—HEALTH RESORTS, WATERING-PLACES, ETC.)

KURKUDYM, F.Ye., dets., otv. red.; BELEN'KIY, M.S., red.; KARAYEV,
R.G., red.; KENTS, V.V., red.; SOKOLOV, A.V., red.

[Therapeutic mineral waters and muds of the U.S.S.R.] Le-
chebnye mineral'nye vody i griazi USSR. Kiev, Zdorov'ia,
1965. 219 p. (MIRA 18:7)

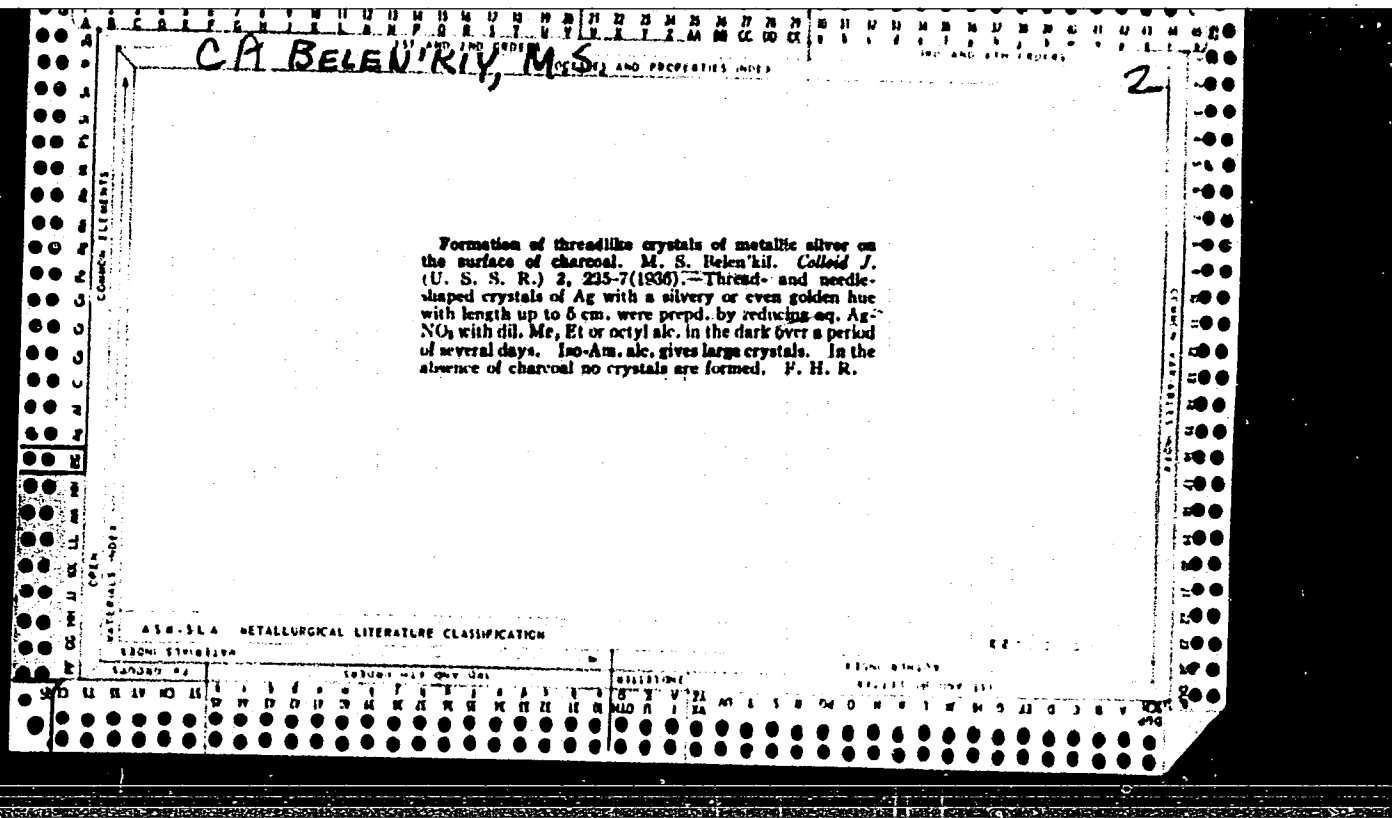
1. Ukrainskiy nauchno-issledovatel'skiy institut kurorto-
logii i fizioterapii.

BELEN'KIY, M. S.

ESTERS OF 2,4,6-TRINITROBENZOIC ACID. I. Phenyl and nitrophenyl esters. P. I. SHORUIGIN AND M. S. BELEN'KIY. *J. Russ. Phys.-Chem. Soc.* 63, 2027-32 (1930). — The Ph ester, m. 170.5-1.5°, is prepd. by heating 2,4,6-(O₂N)₃C₆H₂COCl with PhOH in pyridine. Nitration of the Ph ester under different conditions gives the following esters: *p*-nitrophenyl, m. 138-7°, 2,4-dinitrophenyl, m. 108-9.5°, and 2,4,6-trinitrophenyl, m. 234-5°. B. C. A.

10

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION



BELEN'KIY, M. S.

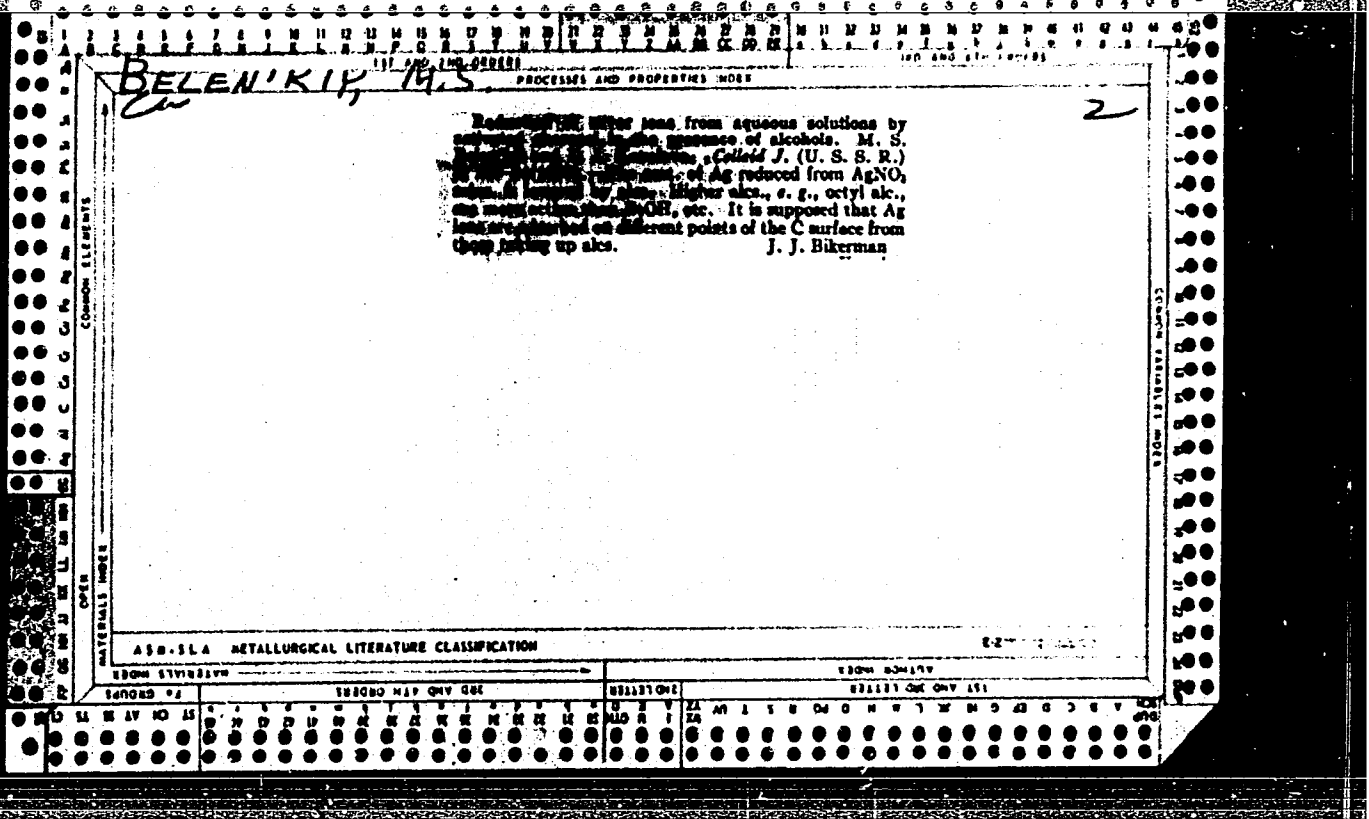
ca

Physicochemical characteristics of lubricating oils. M. S. Belen'kiy and L. I. Kovaleva. *Trudy Akad. Nauk S. S. S. R., Azerbaidzhan. Fiziol. Ser. Fiz. Khim.* 133-50 (1938).—Rupt. study of the heat effect of wetting different metals with oils. Detns. were made of the static coeff. of friction. The heat effect for cast Fe and steel was const. regardless of the degree of oil refining but for lubilit and Cu it increased with degree of refining. The static coeff. of friction and heat effect for Cu were the same with machine oil distillate refined by (1) 1% H₂SO₄ + 1% gumbrin clay, (2) 8% H₂SO₄ + 15% gumbrin clay, (3) 8% H₂SO₄ + 2% gumbrin clay and (4) 8% H₂SO₄ + 1% gumbrin clay. Coeff. of friction increases with reduction in resin content. Increase in naphthenic acid lowers tension on interface with water or KCl soln. and lowers coeff. of friction. Heat effect of wetting is not a good criterion for the evaluation of the lubricating characteristics of oils of various degrees of refining. The tension on interface with water or a strong electrolyte (KCl) may serve as a criterion of the degree of refining and also to some extent of the lubricating qualities.

B. Z. Kamkh

22

ASB-514 METALLURGICAL LITERATURE CLASSIFICATION



BELEN'KIY, M. J.

Effect of thermal treatment and methods of preparation of the alumina support on the catalytic properties of molybdenum catalysts? M. S. Belen'kiy, N. G. Kuznetsov, and Ya. P. Skornitsko. *Trudy Akad. Nauk. Inst. im. M. A. Lomonosova* 1955, No. 11, 60-63 (in Russian). — A catalyst for aromatization of hydrocarbons was made from Al_2O_3 which was obtained from an aluminate by treatment with HNO_3 , washed free from NO_3^- , dried below 100° , mixed with dil. HNO_3 , shaped, thermally treated, and impregnated with MoO_3 . If the Al_2O_3 is calcined at a low temp., it promotes mostly dehydrogenation of naphthenes, but when it is calcined at higher temp. dehydrocyclization becomes more pronounced; this indicates that Al_2O_3 is an active catalyst component in the mixed catalyst. Impurities in Al_2O_3 affect catalyst activity, coke formation, and the course of the reaction.

W. M. Steinberg

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BELENKIY, M. S.

Adsorption of salts by activated carbon. I. Kinetics of adsorption of silver salts from aqueous solution by activated carbon. M. S. Belenkiy and L. G. Alkhuzov. *Trudy Azerbaidzhan. Inst. Khim. im. M. Azadkhan* 1956, No. 12, 106-117. AgNO₃(I), AgNO₃(II), AgOAc(III), and Ag₂SO₄(IV); in 0.015N soln. were reduced by leaching with hot ash content of which was reduced by leaching with hot HNO₃, and on an ashless carbon (VI) prepd. by heating sucrose and activating in CO₂ at 830°. After 13 min. the amt. adsorbed (meq./g.) on V at 14° and 29° are, resp.: I, 0.231, 0.245; II, 0.142, 0.131; III, 0.152, 0.182; IV, 0.085, 0.085. On VI the amts. are: I, 0.728, 0.728; II, 0.422, 0.422; III, 0.0204, 0.0495; IV, 0.0062, 0.0062. Log-log graphs of $q = at^n$, where q is amt. adsorbed in the time t , and a and n are const., showed: for I, II, and IV on V straight lines that changed slope after 8-10 min., but curved lines for III; on VI curved lines for I and III, intersecting lines for II as before. The empirical equation $t/q = (1/a) + (b/a)t$, in which a and b are const., gave simple straight lines for all salts on V, and for II on VI, but curves for I and III on VI.

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BELEN'KIY, M.S.; KUZyatINA, H.S.; SKORUPKO, Ya.P.

Effect of promoters from elements of the second group of the periodic system on catalytic properties of molybdenum-aluminum oxide catalysts. *Izv.vys.ucheb.zav.; neft' i gaz* 1 no.10:87-93 '58. (MIRA 12:4)

1. Azerbaydzhanskiy industrial'nyy institut imeni M.Azizbekova.
(Catalysts)

SOV/153-2-4-11/32

5(2,4)

AUTHORS:

Belen'kiy, M. S., Alkhazov, T. G.

TITLE:

Investigations in the Field of Adsorption of Salts by Activated Charcoal. Adsorption Kinetics of Silver Ions by Activated Charcoal From Alcoholic Aqueous Solutions

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1959, Vol 2, Nr 4, pp 528 - 532 (USSR)

ABSTRACT:

The adsorption of electrolytes from aqueous solutions by means of activated charcoal in the presence of nonelectrolytes was investigated in references 1-5. It appeared that the presence of alcohols reduces the adsorbability of silver salts, Traube's rule being observed. The adsorption kinetics, however, was hardly considered or not considered at all. This gap was to be filled by means of the investigation under review by the example of silver-nitrate solutions. The information obtained experimentally on the adsorption kinetics of Ag^+ by the activated charcoal 1, 2, and 3 (sugar charcoal) is shown in figures 1 and 2. Figure 1 illustrates the adsorption kinetics by charcoal and 3 from an aqueous solution as well as alcoholic aqueous solutions with

Card 1/3

Investigations in the Field of Adsorption of Salts by SOV/153-2-4-11/32
Activated Charcoal. Adsorption Kinetics of Silver Ions by Activated Charcoal
From Alcoholic Aqueous Solutions

varying ethanol content. Hence it appears that the adsorption power of charcoal rapidly decreases in relation to Ag^+ with a concentration increase of alcohol in the initial solution. In connection with it the adsorption on these charcoals decreases by 40 to 50%. Figure 2 shows the adsorption under discussion on charcoal 2. Hence it can be seen that the kinetic curves of the adsorption from the aqueous as well as the alcoholic aqueous solution coincide completely. Ethanol does not noticeably suppress the adsorption process on this charcoal. Because of the entirely different effect of ethanol on the adsorption on charcoals 1 and 2, the effect of a different alcohol from the same homologous sequence was checked. Isoamyl alcohol with a concentration of 0.0304 mol/l was used for this purpose. Figure 3 shows the corresponding adsorption curves. Hence it follows that isoamyl alcohol has an effect on the adsorption mentioned similar to ethanol. Thus it appears that a prolonged treatment of charcoal with a weak HNO_3 -solution causes oxidation of its surface, and changes its properties. This problem is discussed in another paper. As can be seen from figure 4, the adsorption from aqueous alcoholic solutions is described by the equation

Card 2/3

Investigations in the Field of Adsorption of Salts by SOV/153-2-4-11/32
Activated Charcoal. Adsorption Kinetics of Silver Ions by Activated Charcoal
From Alcoholic Aqueous Solutions

$q = \frac{at}{1+bt}$ derived by the authors (Ref 6); q = the quantity of silver ions adsorbed during the period t , a and b = constants. Moreover, it can be seen from figure 4 that all lines drawn on account of experimental data are straight lines. This meets the demands of the above equation. The measurements of the surface tension of the aqueous isoamyl-alcohol solution before and after adsorption showed that the presence of AgNO_3 (0.015 n) does not noticeably affect the tension mentioned (Table 1). But the presence of AgNO_3 reduces the adsorbability of alcohol on charcoal 2 more than on charcoal 1. This proves the great variation of the surface character of charcoal caused by a prolonged oxidation. Moreover, the following Soviet names were mentioned in the paper: Shilov, N. A., Lepin', L. K., Dubinin, M. M., Kovaleva, L. I., and Strazhesko, D. I.

There are 4 figures, 1 table, and 6 Soviet references.
ASSOCIATION: Azerbaydzhanskiy institut nefti i khimii, Kafedra obshchey khimii
(Azerbaydzhan Institute of Petroleum and Chemistry, Chair of
General Chemistry)

SUBMITTED: May 20, 1958
Card 3/3

ALKHAZOV, T.G.; BELEN'KIY, M.S.

High-temperature catalytic oxidation of carbon monoxide. Izv. vys.
ucheb. zav.; neft' i gaz 2 no.6:59-65 '59. (MIRA 12:10)

1. Azerbaydzhanskiy institut nefti i khimii im. M. Azizbekova.
(Carbon monoxide) (Oxidation)

ALKHAZOV, T.G.; BELEN'KIY, M.S.

Effect of the composition of iron oxide - alumina catalysts on their activity in the oxidation of carbon monoxide. Izv.vys. ucheb.zav.; neft' i gaz 2 no.11:83-87 '59.

(MIRA 13:4)

1. Azerbaydzhanskiy institut nefti i khimii im. M.Azizbekova.
(Carbon monoxide) (Alumina) (Iron oxide)

S/152/60/000/012/003/007
B027/B068

AUTHORS: Akhundova N. A., Belen'kiy M. S.

TITLE: Oxidation of Carbon Monoxide on Spinel^s at High Temperature

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Neft' i gaz, 1960,
No. 12, pp. 73 - 78

TEXT: In this paper, catalytic activity of spinel^s in the oxidation of carbon monoxide is treated, since problems concerned with the recovery of additional heat by combustion of CO, the purification of air in industrial districts, and the decontamination of exhaust gases become more and more important. The spinel structure of the synthesized compounds was confirmed by the x-ray examination performed by Professor A. Z. Vezirzade. In the course of the experiments, it was found that the spinel^s of the ferromanganese, copper manganite, and copper chromate groups are active at 300°, 400°, and 500°C, with copper manganite being highly active also at 200°C. The effect of volume speed, reaction temperature, and gas-mixture composition on the percentage of CO oxidation as well as the rate

Card 1/2

Oxidation of Carbon Monoxide on Spinels
at High Temperature

S/152/60/000/012/003/007
B027/B068

constant of the reaction on the $MnFe_2O_4$ catalyst were also studied. The oxidation of carbon monoxide on $MnFe_2O_4$ is a first-order reaction with respect to CO. Long-time annealing of manganese ferrite at $900^\circ C$ reduces its activity with the activation energy rising from 5 to 6 up to 6.4 kcal/mole. At 200 to $300^\circ C$, the activity of the catalyst is considerably decreased, and at $400^\circ C$ and more it is lower by 7.0 to 1.5%. The oxidation degree of CO at 400 to $500^\circ C$ even at a volume speed of $6000\ h^{-1}$ was not below 95% for a gas containing 4% CO. At the NIIOGaz (Scientific Research Institute for Gas Purification in Industry and Sanitation), the promotive effect of manganese oxide was utilized to synthesize a siderite-based contact. There are 2 figures, 3 tables, and 11 references: 6 Soviet and 5 US.

ASSOCIATION: Azerbaydzhanskiy institut nefti i khimii im. M. Azizbekova
(Azerbaydzhan Institute of Petroleum and Chemistry imeni
M. Azizbekov)

SUBMITTED: June 30, 1960

Card 2/2

ALKHAZOV, T.G.; BELEN'KIY, M.S.

Electric and catalytic properties of alumina-iron oxide catalysts.
Izv.vys.ucheb.zav.; neft' i gaz 3 no.3:73-80 '60. (MIRA 14:10)

1. Azerbaydzhanskiy institut nefti i khimii imeni M.Azizbekova.
(Catalysts)

ALKHAZOV, T.G.; BELEN'KIY, M.S.

Kinetics and mechanism of the oxidation of carbon monoxide on an iron oxide catalyst. *Izv. vys. ucheb. zav.; nef't' i gaz* 3 no.8: 87-93 '60. (MIRA 14:4)

1. Azerbaydzhanskiy institut nef'ti i khimii imeni M.Azizbekova.
(Carbon monoxide) (Iron oxides)

BELEN'KIY, M.S.; ALKHAZOV, T.G.; MAL'YAN, A.N.

Oxidation of carbon monoxide in regeneration gases, Izv. vys.
ucheb. zav.; neft' i gaz 3 no.10:83-88 '60. (MIRA 14:4)

1. Azerbaydzhanskiy institut nefti i khimii imeni M.Azizbekova.
(Carbon monoxide)

AKHUNDOVA, N.A.; HELEN'KIY, M.S.

High-temperature oxidation of carbon monoxide with spinels.

Izv. vys. ucheb. zav.; neft' i gaz 3 no.12:73-78 '60.

(MIRA 14:10)

1. Azerbaydzhanskiy institut nefti i khimii imeni M. Azizbekova.

(Carbon monoxide) (Spinel group)
(Oxidation)

24-7700

1138 1035 1043

30921
S/125/01/002/003/006/009
E030/E111

AUTHORS: Belen'kiy, M.S., and Alkhazov, T.G.

TITLE: Influence of oxygen and carbon monoxide on the electrical conductivity of iron oxide

PERIODICAL: Kinetika i kataliz, v.2, no.3, 1961, 368-373

TEXT: Experiments have been carried out at around 300 °C in vacuo on the influence on the electrical conductivity of iron oxide of concentrations of oxygen and carbon monoxide far in excess of those required for monolayer formation. The specimens were formed from a fine powder of iron oxide as pellets under 2000 atm pressure, being 18.1 mm long, 8.4 mm broad and 5-6 mm high, depending on the amount of binding oxide. The pellet weights were 2.5, -3.0 g and the surface area determined by adsorption at -195 °C was 1.5 to 2.5 m². The conductivity was measured with a potentiometer of sensitivity 1.5 x 10⁻⁸ A/div, and the temperature was controlled to ± 2 °C. The pressure could be reduced to around 10⁻⁴ mm Hg. On addition of oxygen in any amount from 1.01 to 14.9 mmol x 10³, the conductivity falls by

Card 1/43

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Influence of oxygen and carbon ...

30921
S/195/01/002/003/006/009
E030/E111

a factor of two or three within several seconds, then slowly rises over several minutes to a value well below the original. With carbon monoxide the behaviour is exactly the opposite, with a sharp rise (by a factor of about five) then a gradual fall. After these processes have been repeated several times on one specimen the change $\Delta\sigma/\Delta q$ with volume of gas is plotted against mean conductivity (Fig.5). In each case the initial steep variation corresponds with monolayer formation, but the successive slower change is at much higher concentrations. The mechanism suggested for oxygen is one of monolayer formation, followed by gradual diffusion of surface atoms into the crystal lattice, with a reaction between Fe_2O_3 and Fe_3O_4 . With carbon monoxide, surface oxygen is rapidly reacted to cause the steep rise, until the rate of diffusion of oxygen to the surface equals the reaction rate, and hence the subsequent fall. Adsorption data and magnetic data are given to support this view. It is stated that the work is being continued. G.I. Chufarov and Ye.P. Tatiyevskaya are mentioned in the article for their contributions in this field.

X

Card 2/43

Influence of oxygen and carbon ...

30821
S/195/61/002/003/006/009
E030/E111

There are 5 figures and 8 references: 7 Soviet-bloc and 1 non-Soviet-bloc. The English language reference reads as follows:
Ref.5: E.R.S. Winter, J. Chem. Soc., 3824, 1955.

ASSOCIATION: Azerbaydzhanskiy institut nefti i khimii im.
M. Azizbekova, Baku
(Azerbaydhan Petrochemistry Institute imeni
M. Azizbekov, Baku)

SUBMITTED: November 10, 1960

Card 314 3

X

SULTANOV, M.Yu.; BELEN'KIY, M.S.

Effect of composition on the properties of copper-chromium
oxide catalysts in the oxidation of carbon monoxide. *Izv. vys.
zar.; neft' i gaz* 5 no.9:63-69 '62. (MIRA 17:5)

1. Azerbaydzhanskiy institut nefti i khimii im. M. Azizbekova.

S/081/62/000/023/058/120
B160/B186

AUTHORS: Belen'kiy, M. S., Alkhazov, T. G., Mal'yan, A. N.

TITLE: Effect of lithium oxide on the properties of iron oxide catalysts

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 23, 1962, 468, abstract 23K203 (Azerb. khim. zh., no. 2, 1962, 95-101 [Summary in Azerb.])

TEXT: Catalysts were made by the decomposition of "pure" $\text{Fe}(\text{NO}_3)_3$. Separate portions of the iron oxide obtained were impregnated with calculated amounts of LiNO_3 solution ("pure" grade), slightly dried and pressed into tablets under a pressure of 2600 kg/cm^2 . The tablets were baked in air for 5 hours at $900-950^\circ\text{C}$ and then broken into small pieces of 2-3 mm size. Adding small amounts of Li_2O strongly reduces the activity of the catalyst. The minimum of activity is shown in a catalyst containing 0.7% Li_2O . The introduction of Li_2O leads to a reduction in the catalyst's

Card 1/2

Effect of lithium oxide on the...

S/081/62/000/023/058/120
B160/B186

density and an increase in its specific surface area. 6 references.
[Abstracter's note: Complete translation.]

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Card 2/2

BELEN'KIY, M.S.; ALKHAZOV, T.G.; POSTEMEYN, I.B.

Effect of the treatment with dilute nitric acid on the
adsorption properties of charcoals. Izv.vys.ucheb.zav.;khim.
i khim.tekh. 5 no.3:433-438 '62. (MIRA 15:7)

1. Azerbaydzhanskiy institut nefti i khimii imeni M. Azizbekova,
kafedra fizicheskoy khimii.
(Charcoal) (Adsorption) (Nitric acid)

8/152/63/000/002/001/003
B126/B186

AUTHORS: Sultanov, M. Yu., Belen'kiy, N. S.

TITLE: Oxidation of CO and high-degree oxidation of n-heptane on a copper-chromium oxide catalyst $2\text{CuO}\cdot\text{Cr}_2\text{O}_3$.PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Neft' i gaz, no. 2
1963, 50 - 55

TEXT: Detailed tests on the above reactions were carried out with a view to decontaminating exhaust and recovery gases. The catalyst obtained by decomposition of precipitated copper and chromium hydroxides at 180°C was heated for 2 hrs and broken into pieces of 3 - 3.5 mm. At a volume velocity of 52000 hr^{-1} 85 % CO was oxidised at 280°C and 80 % n-heptane at 300°C . The size of the pellets did not influence the activation energy. The course of the reaction with CO and n-heptane was of the first order and with oxygen zero. The kinetics of CO oxidation in concentrations of 0.5 to 6 % can be expressed by a simple equation. For the kinetics of high-degree oxidation of n-heptane this equation applies only if the initial concentration is constant, as its increase reduces the reaction velocity. Tests

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Oxidation of CO and high-degree oxidation ...

S/152/63/000/002/001/005
B126/B186

with 2 % vapour in the blend showed that reaction was deferred about 1.5 times. The same decrease in the oxidation velocity of CO and n-heptane was also observed after 620 hrs of work. However the initial oxidation degree can be regained by increasing the temperature by 20°C. There are 4 figures and 3 tables.

ASSOCIATION: Azerbaydzhanskiy institut nefiti i khimii im. M. Azizbekova
(Azerbaydzhān Institute of Petroleum and Chemistry imeni
M. Azizbekov)

SUBMITTED: July 17, 1962

Card 2/2

BELEN'KIY, M.S.

"Health resorts in Moldavia" by V.IA.Negrescu. Reviewed by
M.S.Belen'ki. Vop.kur., fizioter.i lech.fiz.kul't. 28
no.1:87-88 '63. (MIRA 16:4)
(MOLDAVIA—HEALTH RESORTS, WATERING PLACES, ETC.)
(NEGRESCU, V.IA.)

ALKHAZOV, T.G.; BELEN'KIY, M.S.

Catalytic and electric properties of coprecipitated iron
oxide-alumina catalysts. Izv. vys. ucheb. zav.; neft' i
gaz 5 no.3:69-74 '62. (MIRA 16:8)

1. Azerbaydzhanskiy institut nefti i khimii imeni M. Azizbekova.

BELEN'KIY, M.S.; ALKHAZOV, T.G.

Mild catalytic oxidation of butene to bivynil. Izv.vys.ucheb.zav;
neft' i gaz 6 no.9:57-60 '63. (MIRA 17:2)

1. Azerbaydzhanskiy institut nefti i khimii im. M.Azizbekova.

ACCESSION NR: AP4018335

S/0152/64/000/002/0049/0054

AUTHOR: Alkhazov, T. G.; Belen'kiy, M. S.; Motyakova, R. I.; Khiteyeva, V.M.

TITLE: A study of catalytic butylene oxidation into divinyl

SOURCE: IVUZ. Neft' i gaz, no. 2, 1964, 49-54

TOPIC TAGS: butylene fast oxidation, catalytic butylene oxidation, divinyl, butylene, CO₂

ABSTRACT: The new methods of oxidizing dehydrogenation of olefines at high rates is the subject of some U. S. A. and British patents. Notwithstanding general interest, very little is known about these processes. The purpose of the authors was a detailed study of how various parameters influence butylene oxidation by air. They undertook tests over a fixed catalyst bed (catalyst not specified). Other conditions were: temperature 450-500C, volumetric velocity reduced to room conditions 1800-9000 hr⁻¹, butylene/air ratio 1:6 to 1:1. In the gaseous reaction products, only divinyl, carbon dioxide and unreacted butylene were found (traces of carbon monoxide and nitrogen enriched air). At a volume-

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ACCESSION NR: AP4019335

tric velocity of 9000 hr^{-1} , the increase of butylene content by 3.8x results in decreased butylene oxidation into divinyl and carbon dioxide (at 450C), with the proportion of decrease being 5.4 and 2.1, respectively. Changes in the initial composition have a different influence on complete and soft oxidation. The maximum productivity is achieved at a volumetric velocity of 9000 hr^{-1} , a temperature of 550C , and butylene/air ratio 1:2. The yield is then 1.6 kg divinyl over one liter of catalyst. The ratio of divinyl/ CO_2 yield is then 10 which is the maximum achieved during these tests. Increasing the temperature results in a higher percentage of oxidation and higher effectiveness of the catalyst. This trend continues until the oxygen content reaches a certain minimum when the reaction slows down and secondary reactions (polymerization) set in. Orig. art. has: 4 figures, 1 table.

ASSOCIATION: Azerbaydzhanskiy institut nefti i khimii im. M. Azizbekova
(Azerbaijani Petroleum and Chemical Institute)

SUBMITTED: 22Nov63

DATE ACQ: 27Mar64

ENCL: 00

SUB CODE: CH

NO REF SOV: 003

OTHER: 005

Card 2/2

VARTANOV, A.A.; BELENKIY, M.S.; ALKHAZOV, T.G.

Possibility of obtaining isoprene by the oxidative dehydrogenation of isosmylenes. *Izv. vys. zav.; neft' i gaz* ?
no.6:45-48 '64. (MIRA 17:9)

1. Azerbaydzhanskiy institut nefti i khimii imeni Azizbekova.

BELEN'KIY, M.S.; KARACHUNSKAYA, F.Ya.

Briquetted mud from the Kuyalnitskiy Liman and the first experiment in its use for therapeutic purposes. Vop. kur., fizioter. i lech. fiz. kul't. 28 no.5:454-457 S-0 '63.
(MIRA 17:9)

1. Iz revmatologicheskoy kliniki (zav.- M.S. Belen'kiy)
Ukrainskogo instituta kurortologii i fizioterapii (dir.- dotsent F.Ye. Kurkudym).

L 11319-65 ENT(m)/EPF(c)/EWP(j) PC-4/Pr-4 RM

ACCESSION NR: AP4042484

S/0152/64/900/006/0045/0048

AUTHOR: Vartanov, A. A.; Belen'kiy, M. S.; Alkhazov, T. G. B

TITLE: The possibility of preparing isoprene by the oxidative dehydrogenation of isoamylenes

SOURCE: IVUZ. Neft' i gaz, no. 6, 1964, 45-48

TOPIC TAGS: Isoprene, butadiene, isoamylenes, isoprene preparation, dehydrogenation, oxidative dehydrogenation, hydroxydipropionitrile

ABSTRACT: In the case of butadiene, the low yields caused by the reversibility of the dehydrogenation reaction, the endothermic nature of the process and the need for period regeneration of the catalyst can be overcome by continuous oxidative dehydrogenation. The authors therefore investigated this process for the preparation of isoprene from isoamylenes (prepared from isoamyl alcohol) by passing a mixture of isoamylenes and air over an immobile catalyst layer (β, β' -hydroxy-dipropionitrile on diatomaceous earth) under varying conditions of flow rate and temperature (450-565C). The apparatus is described, and data for trial runs with and without a catalyst carrier are tabulated. The best yields of isoprene (approx. 26 mol.% or 3.0 kg/hr./liter catalyst) were obtained at 560C without a carrier and at relatively rapid rates of flow. Orig. art. has: 3 figures and 1 table.

Card 1/2

L 11319-65

ACCESSION NR: AP4042484

ASSOCIATION: Azerbaydzhanskly Institut nefti i khimi im. N. Azizbekova (Azerbaijan Institute of Petroleum and Chemistry)

SUBMITTED: 28 Jan 64

ENCL: 00

SUB CODE: 00

NO REF SOV: 007

OTHER: 003

Card 2/2

VARTANOV, A.A.; ALKHAZOV, T.G.; BELEN'KIY, M.S.

Studying the effect of oxygen and isoamylene concentrations on their oxidative dehydrogenation. Izv. vys. ucheb. zav.; neft' i gaz 8 no.3:72, 34 '65. (MIRA 18:5)

1. Azerbaydzhanskiy institut nefti i khimii im. M. Azizbekova.

ALKHAZOV, T.G.; BELEN'KIY, M.S.; KISELEVA, N.A.

Effect of isobutylene on the oxidative dehydrogenation of
butylenes. Izv. vys. ucheb. zav.; neft' i gaz 8 no.2:82,88
'65. (MIRA 18:3)

1. Azerbaydzhanskiy institut nefti i khimii im. M. Azizbekova.

VARTANOV, A.A.; BELEN'KIY, M.S.; ALKHAZOV, T.G.

Investigating the effect of the volumetric speed and temperature on the oxidative dehydrogenation of isobamlenes. Izv. vys. ucheb. zav.; neft' i gaz 8 no.4:40,52 '65. (MIRA 18:5)

1. Azerbaydzhanskiy institut nefti i khimii im. M.Azizbekova.

BELEN'KIY, M.S.

Belen'kiy, M.S. "On the reaction of the physiological system of the connective tissues to mud treatment. On the problem of the mechanism of the action of mud therapy", Vracheb. delo, 1949, No. 1, paragraphs 55-60.

SO: U-3042, 11 March 53, (Letopis 'nykh Statey, No. 9, 1949)

BELIN² KIY, M.S.

~~_____~~
Differential diagnosis of brucellous sacroiliitis. Sovet. med. 16 no.
3:38 Mar 1952. (GML 22:1)

1. Odessa.

BELEN'KIY, M.S.

Localisation of damages of the muscles and ligaments in brucellosis.
Klin. med., Moskva 30 no.2:43-44 Feb 1952. (CIML 22:1)

1. Of the Rheumatological Clinic, Ukrainian Institute of Health Resort
Therapy (Director -- A. I. Sokolov), Odessa.

HELEN'KIY, M.S.

[Resort mud-cure methods] Metodika kurortnogo griznelechenia.
Kiev, Gos.med.izd-vo USSR, 1955. 105 p. (MIRA 9:5)
(BARTHS, MEDICAL AND SURGICAL USES OF)

BELEN'KIY, M.S.

USSR/Chemical Technology - Chemical Products and Their Application. Electrochemical Manufacturing. Electrodeposition. Chemical Sources of Electrical Current, I-8

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 62180

Author: Belen'kiy, M. S., Rostomyan, P. M.

Institution: None

Title: Development of a Method for Rapid Evaluation of the Quality of Activated Pyrolusite

Original

Periodical: Tr. Azerb. industr. in-te, 1956, No 12, 118-122; Azerbaijani resumé

Abstract: There is proposed a rapid method for evaluating the quality of activated pyrolusite (GAP) based on the dependence of the thermal effect (TE) of the reaction taking place in a galvanic cell upon the quality of GAP. To determine TE the cell is immersed up to the neck of the jar into a calorimeter filled with water and after the thermal equilibrium has been reached the circuit is closed over an 0.5 ohm resistance located outside of the calorimeter. Evaluation of quality of GAP is provided by the amount of heat generated within 10-16 minutes.

Card 1/1

BELEN'KIY, MORSEY SAMOYLOVICH

~~BELEN'KIY, Morsey Samoylovich~~; TURKO, Boris Pavlovich; SHPIL'BERG, Grigoriy
Ioannovich; KIRICHINSKIY, A.P., redaktor; LOKHMATYY, Ye.G., tekhnicheskii redaktor

[Health resorts of the Odessa sanatorium district] Zdravnitsy
odesskogo kurortnogo raiona. Kiev, Gos.med.izd-vo USSR, 1957.
94 p. (MIRA 10:9)
(ODESSA PROVINCE--HEALTH RESORTS, WATERING PLACES, ETC.)

BELEN'KIY, M.S.; RYBCHINSKAYA, Ye.M.

Health resort therapy, therapeutic baths and adrenocorticotrophic hormone in the compound treatment of infectious nonspecific polyarthritis. Terap.arzh. 29 no.6:62-68 Je '57. (MIRA 10:10)

1. Iz revmatologicheskoy kliniki (zav. M.S.Belen'kiy) Ukrainskogo instituta kurortologii.

(ARTHRITIS, RHEUMATOID, therapy,
ACTH with balneother. (Rus))

(BALNEOLOGY, in var. dis.
rheum. arthritis, with ACTH (Rus))

(ACTH, therapeutic use,
rheum. arthritis, with balneother. (Rus))

B

BELEN'KIY, M.S.; RYBCHINSKAYA, Ye.M. (Odessa)

Combined mud and butadione therapy in nonspecific infectious poly-
arthritis. Vrach.delo no.1:7-9 '59. (MIRA 12:4)

1. Revmatologicheskaya klinika i biokhimicheskaya laboratoriya Ukrain-
skogo instituta kurortologii.
(PYRAZOLIDINEDIONE) (BATHS, MOOR AND MUD)
(ARTHRITIS, RHEUMATOID)

BELEN'KIY, M.S. (Krivoy Rog)

Case of "isolated" endobronchitis. Vrach. delo no.8:122 Ag '61.
(MIRA 15:3)

1. Chetvertyy protivotuberkuleznyy dispanser, Krivoy Rog.
(BRONCHITIS)

BELEN'KIY, M.S.; RYBCHINSKAYA, Ye.M.

Combined treatment using mud, medical gymnastics and liver diathermy of patients with chronic infectious nonspecific polyarteritis. Vop. kur., fizioter. i lech. fiz. kul't. 26 no.4:356-357 JI-Ag '61.

(MIRA 15:1)

1. Iz revmatologicheskoy kliniki (zav. M.S.Belen'kiy) i biokhimicheskoy laboratorii (zav. Ye.M.Rybchinskaya) Ukrainskogo instituta kurortologii v Odesse (dir. dotsent A.V.Sokolov).

(ARTERIES__INFLAMMATION)

(EXERCISE THERAPY)

(DIATHERMY)

(BATHS, MOOR AND MUD)

BELEN'KIY, M.S.

Some unresolved problems of mud bath therapy. Vop. kur., fizioter.
lech. fiz. kul't. 26 no.5 391-395 8-0 '61. (MIRA 14:11)

1. Iz Ukrainского instituta kurortologii i fizioterapii (dir. -
detsent' F.Ye. Kurkudym).
(BATHS, MOOR AND MUD)

BELEN'KIY, M.S.; ZYBINA, M.A. (Krivoy Rog)

Tuberculosis of the stomach. Vrach. delo no.1:145-146 Ja '62.
(MIRA 15:2)

1. Onkologicheskij dispanser, Krivoy Rog.
(STOMACH...TUBERCULOSIS)

BELEN'KIY, M.S.; RYBCHINSKAYA, Ye.M.; RUKHEL'MAN, R.O.

Dynamics of the restorative process in infectious nonspecific (rheumatoid) polyarthritis during compound health resort treatment according to data on the clinical aspects of the disease and some laboratory data (protein fractions in the blood serum and detailed erythrocyte sedimentation reaction). Zdravookhranenie 5 no.1:30-35 Ja-F '62. (MIRA 15'4)

1. Iz revmatologicheskoy kliniki i biokhimicheskoy laboratorii Ukrainskogo instituta kurortologii i fizioterapii (direktor dotsent F.Ye. Kurkudym).

(ARTHRITIS, RHEUMATOID) (BLOOD PROTEINS)
(ERYTHROCYTES)

SULTANOV, M.Yu.; BELEN'KIY, M.S.

Influence of composition on the properties of copper-chromium-oxide catalyts in the reaction of total oxidation of n-heptane. Izv.vys. ucheb.zav.; neft' i gaz 5 no.12:59-64 '62. (MIRA 17:4)

1. Azerbaydzhanskiy institut nefti i khimii imeni M. Azizbekova.

BELEN'KIY, M. Ya.

USSR/Physics - Elasticity Theory May/June 52

"Mixed Problem of the Theory of Elasticity for an Infinitely Long Strip," M. Ya. Belen'kiy, Leningrad State U

"Priklad Matemat i Mekh" Vol XVI, No 3, pp 283-292

Solves the mixed problem of elasticity theory for an infinitely long strip. Incidentally solves the auxiliary problem, namely, the problem with stresses given on the boundary of the strip. Submitted 29 Jun 51. /

214T91

BELLEN'KIY, M.Ya. (Leningrad)

Some axially-symmetric problems on the theory of elasticity.
Prikl.mat.i mekh. 24 no.3:582-584 My-Je'60. (MIRA 13:10)
(Elasticity)

BELEN'KIY, M. Ya., kand. fiziko-matematicheskikh nauk

Approximate solution of lock filling and emptying equations.

Trudy LITV n. 8:3-8 '60.

(MIRA 15:2)

(Locks (Hydraulic engineering))

BELEN'KIY, M.Ya., kand. tekhn. nauk; FEVZNER, S.M., inzh.

Solving differential equations for the curve of a scoinson
arch type structure of general form. Trudy LIT no.47:
21-26 '63. (MIRA 17:9)

BELEN'KIY, M. Z. Dr. Chem. Sci.

Dissertation: "Experimental Research in the Field of Oxides of the Transition Elements." Inst of Physical Chemistry, Acad Sci USSR, 7 Jun 47.

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

117 AND 118 SERIES PROCESSES AND PROPERTIES INDEX

Ca *Bakoni, Kiy, V.* 17

Orach as a source of vitamin A. N. Bekp'kil and E. Sakharova. *Sov. Fiziol. Zh.* 1939, No. 5, 27-8; Khim. *Referat. Zh.* 1939, No. 12, 40.—Orach flour is a valuable source of vitamin A for chicks. Addn. of the flour in amt. of 0.5 and 1% protected the chicks from avitaminosis; 0.25% addn. was insufficient. Xerophthalmia could be cured after 11-14 days by 3% of the flour in the diet. W. R. Hens

COMMON ELEMENTS

COMMON VARIABLES INDEX

ASB-11A METALLURGICAL LITERATURE CLASSIFICATION

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

Simplified saliva pump. Stomatologia no.5:50-51 S-0 '54.
(MLRA 7:11)

(DENTISTRY, apparatus and instruments,
salivary ejector)

(SALIVA,
salivary ejector)

BELEN'KIY, N. D.

USSR/Electronics
Oscilloscope

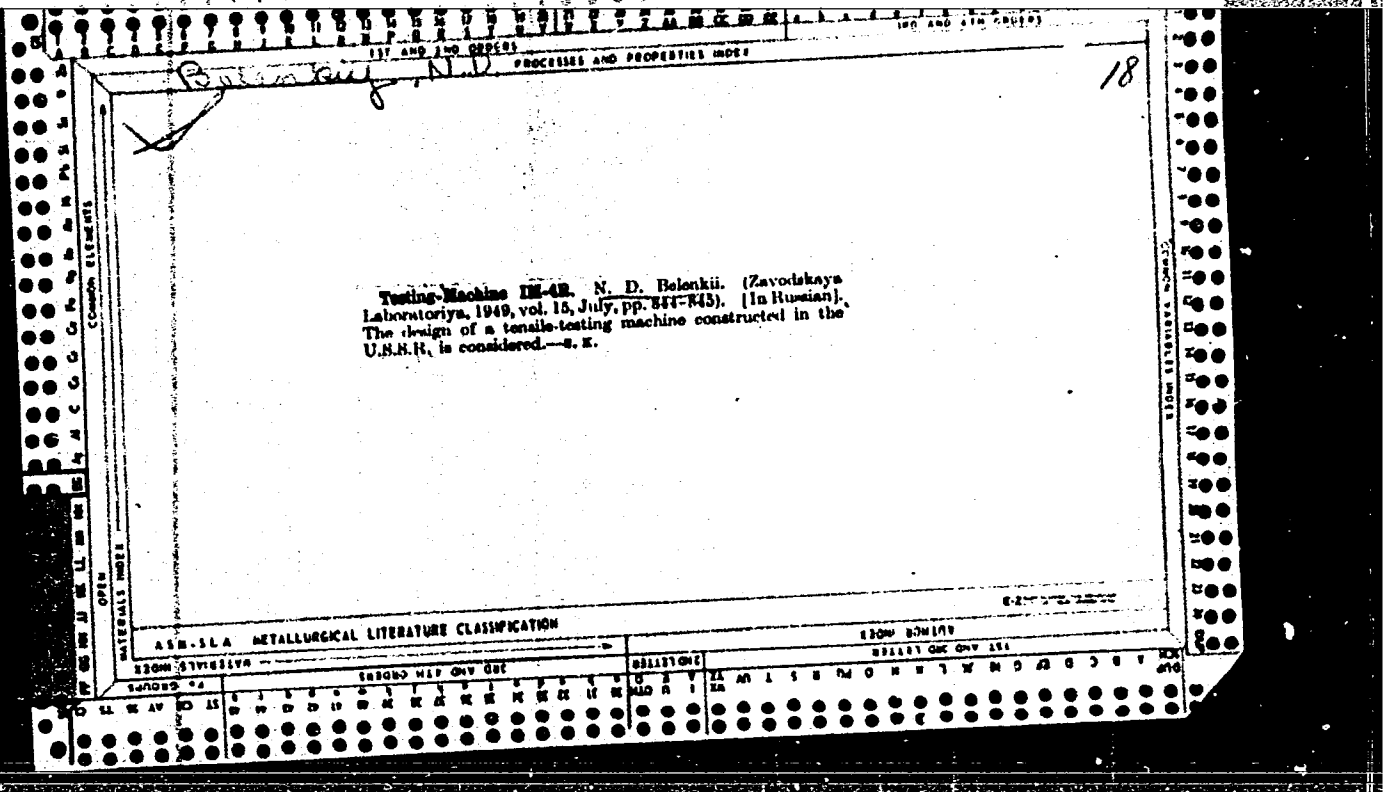
Dec 48

"A Portable Oscilloscope," N. D. Belen'kiy, 1/2 p

"Zavod Lab" Vol XIV, No 12

Moscow Mech Technicum has produced two experimental batches of the PO-4 portable four-trace oscilloscope, designed by Ye. S. Borisevich, and has begun series production. Describes apparatus. Includes photograph.

49/49T36



BELEN'KIY, N. D.

"Contemporary Agents for Transfusion and Indications as to their Medical Application," Khirurgiya, 1952, No. 11

BELEN'KIY, N. G.

"Effect of the Time of Bleeding large horned cattle on the quality and quantity of meat," Doklady Vsesoyoz Akad. S-Kh Nauk in Lenina No. 1, 1947. (p. 7-19).

BELEN'KIY, N. G.

USSR/Medicine - Blood Transfusion
Medicine - Serotherapy and Hemotherapy

Jun 48

"Possible Use of Blood Obtained From Live
Animals (Blood Serum of Large-Horned Cattle as a
Substitute for Blood)," N. G. Belen'kiy, Dr Biol
Sci, L. Ye. Kaplan, Cand Biol Sci, F. A. Gubar'ev,
Cand Biol Sci, 11 pp

"Dok v-s Ak Selkhoz Nauk" No 6

Non-specific serum from cattle blood is a satis-
factory plasma substitute. Produced good results
even in cases where test animals had lost up to
70% of their blood. Large intravenous doses
cause no undesirable reaction. Repeated injections
33/49774

USSR/Medicine - Blood Transfusion (Contd) Jun 48

of non-specific serum produced no aftereffects.
Submitted 3 May 48.

33/49774

BELEN'KIY, N.G.

Belen'kiy, N. G., Kuznetsov, I. M., and Yevstigneyev, S. N.
"Academician Mikhail Iudovich D'yakov (Zootechnologist) on
his seventieth birthday and 45th year of scientific-scholastic
and general achievement," Vestnik zhivo-novodstva, 1948,
Issue 6, p. 103-10, with picture - Bibliog: "List of scholarly
treatises of noteworthy scientific quality, doctor of
sciences, academician of medical practice, laureate of the
Stalin prize, M. I. D'yakov," p. 107-10

SO U-3264, 10 April 1953, (Letopis 'Zhurnal 'nykh Statey, No. 3, 1949)

BELEN'KIY, N. G.

"Tetanus in Horses and Its Control," Veterinariya, No. 8, 1948.

BELEN'KIY, N. G.

"Tetanus in Horses and Its Countermeasures," Veterinariya, No. 9, 1948.

N. F. Gamaleya, Hon. Mem., Acad. Sci. USSR.

BELEN'KIY, N.G.

Belen'kiy, N.G. "The influence of the degree of sheltering of cattle on the quality and quantity of its meat", Doklady Vsesoyuz. akad. s.-kh. nauk im. Lenina, 1949, Issue 1, p. 7-19.

SO: U-3042, 11 March 53, (Letopis 'nykh Statey, No. 9, 1949)

BELEN'KIY, N. G.

UssR/Poland - Blood Serum
Cattle

Feb 49

"Utilizing the Blood of Farm Animals," Acad N. G.
Belen'kiy, V. V., Novosel'skaya, Genl Biol Sci,
Moscow Chem and Tech Inst of Meat Ind, 6 pp

"Dokl v-s Ak Selkhoz Nauk" No 2

Studies, tabulars, and discuses data on the
physicochemical indexes and chemical properties
of nonspecific bovine blood serum. Examined
changes in these properties after keeping this
serum for 8 months. Found the properties to be
very similar to those of human plasma and whole
blood. The few changes observed after the 8-month
period were minor and in no case affected the
value for transfusion in man. Longer
preservation at temperatures of 15-20° C did
not affect its therapeutic properties.

66/49185

CA

11

The utilization of the blood of farm animals. N. G. Belen'kiĭ. *Doklady Vsesoyuz. Akad. Sel'sko-Khoz. Nauk im. V. I. Lenina* 14, No. 6, 36-40 (1949).—The blood serums of dairy cattle were studied at various stages of regeneration after bleeding and as to the effects of these serums when introduced into animals. The exptl. animals were rabbits and dogs. In the course of blood regeneration, after quantities of blood have been withdrawn, large quantities of hemoctin substances are formed. The largest quantity of these substances is formed 24 hrs. after 50% removal of the blood from cattle. The speed of regeneration of blood in dogs and rabbits under the influence of the hemoctin substances of the blood serum of cattle varies. In rabbits it occurs after one week and in dogs 2 weeks after transfusion. I. S. Joffe

CA

11E

The physiology of protein nutrition of the animal organism. N. G. Beien'kil. *Doklady Vsesoyuz. Otdena Lenina* (ibid. *Sobremenn. Nauch. i. T. Lenina* 13, No. 1, 3-11 (1951)).—Blood serum of meat animals treated by some physicochem. methods was tried as a source of protein on dogs subjected to starvation. The serum was injected intravenously, the metabolism followed by weighing the animals, recording the temp. and other indexes. The endogenic N was followed carefully. At times this N amounted to 170% of the protein injected. It is claimed that the worked-over serum of animal blood may be used effectively for intravenous injection whenever necessary.

J. S. Joffe

27

112

Physiology of parenteral protein nutrition. N. G. Belen'.
pt. *Uspehi Sovremennoi Biol.* 30, 49-67(1950).—Clinical
and exptl. results are reviewed. 27 references.
Julian P. Smith

1751

BELFN'KIY, N. G.

Standardizing protein in poultry rations. Moskva, Gos. izd-vo sel'khoz lit-ry,
1951.

SO: MLRA. June 1952

BELENKY, N. G.

"N. G. Belenky, Serum Made Free of Specific Characters." (p. 70) by Popov, N. F.

SO: Journal of General Biology XII (Zhurnal Obshchei Biologii) Vol. 12, No.1, 1951.

BELEN'KII, N. G.

"Parenteral Protein Nutrition of Man and Animals, by N. G. Belen'ki." (p. 156)
by Simonyan, K. S.

SO: Progress of Contemporary Biology, 1951, Vol. XXXI, No. 1, January-February

BELENKIY, N. G.

"Non-specific serum; biological properties and application." Reviewed by
V. V. Vlodayets. Khirurgiia no. 3, 1952.

SO: MLRA. August 1952

BELEN'KIY, N.G., akademik.

Infusoria in calves. Veterinaria 30 no.12:25-35 D '53.(MLRA 6:11)

BELEN'KIY, N.G.

SOFRONOV, B.N.

"Blood serum transfusion in animals (species nonspecific serum)."
N.G.Belen'kii. Reviewed by B.N.Sofronov. Zhur.mikrobiol.epid.i
immun. no.5:114-116 My '55. (MLRA 8:7)
(ALLERGY)
(BLOOD--TRANSFUSION)
(BELEN'KII, N.G.)

BELEN'KIY, N. G.

✓ A study of the circulation of the proteins of curative serum by means of radioactive iodine (iodine 131). N. G. Belen'kiy, N. N. Krylova, I. L. Chertkov, and L. D. Zueva. *Izvestiya Vsesoyuz. Akad. Sel'skokhoz. Nauk (m. V. I. Lenina* 20, No. 4, 34-6 (1955).—The curative Belen'kiy serum (LS) treated with radioactive I was tested on rabbits and dogs. After 48 hrs. the blood of dogs contained 30% of the original radioactivity. In rabbits only 13% was found.

J. S. Joffe

MP (3)

USSR/Farm Animals. General Problems

Q-1

Abs Jour : Ref Zhur - Biol., No 8, 1958, No 35593

Author : Balonitskiy N.G.

Inst : Not Given

Title : On the Increase of the Vitality of the Animal Organism (O povyshenii zhiznennosti zhiivotnogo organizma)

Orig Pub : Dokl. VASKhNIL, 1956, vyp. 2, 28-30

Abstract : The experiments carried out in the Kazakh SSR demonstrated that, under the influence of non-specific serum, the activity of semen was increased, on the average, by 37%, the volume of ejaculum augmented by 42%, and the concentration of spermatozoa increased by 44.2%. 716 ewes were inseminated by one ram, as against 226 ewes inseminated by a control ram. In experiments with rabbits, the mating attained 100%, and fertilization after first coupling was 86%, as against 72 and 60% in the controls. In the sovkhos "Faustovo", near Moscow, in cows long infertile and without sexual desire, after injection of the non-specific serum the heat could be observed in 100% of cases.

Card : 1/1

USSR/Human and Animal Physiology - (Normal and Pathological).
Blood, Blood Transfusion and Blood Substitutes.

T-4

Abs Jour : Ref Zhur - Biol., No 11, 1958, 50710

Author : Belen'kiy, N.G.

Inst : All-Union Academy of Agricultural Sciences.

Title : The Problem of Preparing Blood Substitutes from the Blood
of Farm Animals.

Orig Pub : Dokl. VASKNIL, 1956, No 7, 11-16.

Abstract : A review of studies is presented on the problem of preparing blood substitutes, namely, the serum of Belen'kiy, as well as parenterin. The advantages of using blood substitutes as against the blood of donors are mentioned, and a description is given of the characteristics of such blood substitutes, of their compositions, and of the transfusion reactions of animals and of man to them.

Card 1/2

- 31 -

USSR/Human and Animal Physiology -(Normal and Pathological).
Blood. Blood Transfusion and Blood Substitutes.

T-4

Abs Jour : Ref Zhur - Biol., No 11, 1958, 50710

Described is also a protein hydrolysate, prepared from
blood forming elements, and used for parenteral protein
nutrition. -- M.B. Gol'dberg.

Card 2/2

11/24

The distribution of radioactive methionine- S^{35} in proteins of organs and tissues of cattle and rabbits. N. O. Belen'kii, N. N. Krylova, I. L. Chertkov, L. D. Zueva, and B. A. Sevost'yanov (Chem. Technol. Inst. Meat Ind., Moscow). *Doklady Vsesoyuz. Akad. Sel'skokhoz. Nauk im. V. I. Lenina* 21, No. 8, 6-6 (1956).—In the solution of the problem of obtaining animal blood as a substitute for human blood it is important to evaluate the proteins of these preps, as to the time they would circulate in the vascular system and the degree of their assimilation. For this purpose methionine- S^{35} was used. It was introduced into the protein *in vitro* by injecting it into the vein of the animal donor whose blood was later used as raw material to obtain blood substitutes. A 180-kg bull was injected intravenously with the methionine 3 times at 4 hr. intervals. After the last interval, the animal was kept for 24 hrs. prior to death. The different organs and parts of the body were examined for S^{35} . The dose injected was equal to 85,000 impulses/min./g. of wt. The rabbits received a total activity of 650,000 impulses/min./g. of wt. in 3 injections. After 28 hrs. they were bled to death and their tissues examined. The tissues were ground in a mortar at low temp. in cold water. The proteins were pptd. with 20% CCl_3CO_2H . The pptd. proteins were freed of lipides by extg. them with alc. for 24-28 hrs. and washing with alc. and ether and finally with ether only. When dry, the proteins were ground and radioactivity was detd. About 10% of the injected activity could be recovered after 24 hrs. The highest specific radioactivity was found in the kidneys, liver, small intestine, pancreas; the smallest in muscles, skin, and erythrocytes. The highest abs. quantities of radioactive methionine accumulated in the proteins of muscles, blood, and liver. The central nervous system had a rather small amt. of the methionine- S^{35} . I. S. Ioffe.

BELEN'KIY, N.G., akademik; MESHCHERYAKOVA, M.F., kandidat biologicheskikh nauk.

Protein metabolism in animal organisms at different functional stages of the central nervous system. Dokl.Akad.sel'khoz.21 no.11: 22-28 '56. (MLRA 9:12)

1. Moskovskiy khimiko-tehnologicheskiy institut myasnoy promyshlennosti.

(Nervous system) (Metabolism)

BELEN'KIY, N., akademik; KRYLOVA, N., kandidat biologicheskikh nauk;
POZHARISKAYA, L., kandidat biologicheskikh nauk; CHERTKOV, I.,
kandidat meditsinskikh nauk.

A substitute for donor blood. Mas.ind.SSSR 27 no.2:8-10 '56.
(MLRA 9:8)

(BLOOD PLASMA SUBSTITUTES)

BELEN'KIY, N., akademik; KUZENKO, Ye.; POZHARSKAYA, L., kandidat biologicheskikh nauk; RYNDINA, V.

Separating blood plasma in medium and small meat combines. *Mias.*
ind.SSSR, 27 no.2:10-11 '56. (MLRA 9:8)
(BLOOD PLASMA) (SEPARATORS (MACHINERY))

USSR/Human and Animal Physiology. Metabolism. Nutrition.

T-2

Abs Jour: Ref Zhur-Biol., No 12, 1958, 55322.

Author : Belen'kiy, N.G., Krylova, N.N., Chertkov, I.L.,
Bazarova, K.I., Zuyeva, L.D., Sevost'yanov, B.A.,
Kel'man, L.F.

Inst : All-Union Academy of Agricultural Sciences.

Title : The Influence of Thermal Treatment on the Assimilation
of Meat Protein.

Orig Pub: Dokl. VASKhNIL, 1957, No 4, 23-29.

Abstract: During a period of 6 days, 26 rats of 180-200 gr
body weight each, received daily 10 gr of beef
meat with methionine-S³⁵ proteins. Seven control
rats were given raw ground meat. Nine rats were
fed ground meat which has been heated in an ultra-
thermostate at 80° [C] for one hour, and 10 rats

Card : 1/2

USSR/Human and Animal Physiology. Metabolism. Nutrition.

T-2

Abs Jour: Ref Zhur-Biol., No 12, 1958, 55322.

received ground meat heated in an autoclave at 120°
[C]. Two days after the last (6th) feeding, all
rats were killed. The proteins were extracted from
their plasmas and livers, and their radioactivity
was determined. The assimilation of proteins in
their natural state as compared to those denaturated
by heat did not show any differences. Thereafter,
this investigation was continued on dogs (numbering
8), whereby the nitrogen balance was studied as well.
Here, it was established that natural proteins are
assimilated somewhat better than denaturated pro-
teins. Also, it was established that the degree
of denaturalization does not exert any specific in-
fluence upon protein assimilation.

Card : 2/2

Country : USSR
Category : Farm Animals. Q
 : General Problems.
Abs. Jour : Ref Zhur-Biol., No 21, 1958, 96815
Author : Belen'kiy, N. G.
Institut. :
Title : Using the Blood of Slaughtered Animals as
 Fodder.
Orig Pub. : Vestn. s.-kh. nauki, 1957, No 12, 112-116
Abstract : The technique of preserving blood with quick-
lime, formic acid, sulphuric acid, and common
salt is described. The average daily weight
gains are given of swine which received preser-
ved blood during a 109 day period. The daily
weight gain in swine which received blood pre-
served in quick-lime (150-250 g instead of the
corresponding amount of vegetable protein) was
18 percent higher than in controls. Those ani-
mals which received blood preserved in formic
acid, increased their gains by 13 percent, and
Card: 1/2

Country : USSR
Category : Farm Animals. Q
 : General Problems.
Abs. Jour. : Ref Zhur-Biol., No 21, 1958, 46815
Author :
Institut. :
Title :

Orig Pub. :
Abstract : those which received blood preserved in sulphu-
 : ric acid and salt, by 8 percent.

Card: 2/2

12

BELEN'KIY, N. S.

BELEN'KIY, N.G., akademik; KRYLOVA, N.N., kandidat biologicheskikh nauk;
CHERTKOV, I.D., kandidat meditsinskikh nauk; BAZAROVA, K.I.; ZUYEVA,
L.D.; SEVOST'YANOV, B.A.; KEL'MAN, L.F.

Influence of heat on the protein content of meat. Dokl. Akad. sel'khoz.
22 no. 4:23-29 '57. (MIRA 10:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut myasnoy promyshlen-
nosti.

(Meat)

(Proteins)

BELEN'KIY, N.G., akademik; PAVLOV, V.A., kandidat biologicheskikh nauk.

New method for controlling sterility in cows. Dokl.Akad.sel'khoz.
22 no.8:3 '57. (MLRA 10:9)

1. Moskovskiy tekhnologicheskiy institut myasnoy i molochnoy
promyshlennosti.
(Sterility in animals) (Cows)