LARIONOVA, Ye., kand. ekonom. nauk; LEVIN, L.R., kand. ekonom. nauk; BERLINER, G.Sh., (Tashkent); BELENOV, M.N., kand. 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).
[Technical, industrial and financial plan and analysis of the work of locomotive and car repair plants] Tekhpromfin-
plan i analiz deiatel'nosti lokomotivno-vagonoremontnych zavodov. [By] M.N.Belen'kii i dr. Moskva, Transport,
1964. 253 p. (MIRA 17:9)
Professor V. V. Guk on his 70th birthday. Vop. kur., fizioter. i lech. fiz. kul't. 25 no.2:184-185 Mf-Ap '60. (MIRA 1319) (GUK, VADIM VASIL'EVICH, 1889-...)

1. Reumatologicheskaya klinika (zav. - M.S.Belen'kiy) Ukrainskogo instituta kurortologii i fizioterapii.

(ARTHRITIS) (LIVER—DISEASES)
"Health resorts of Moldavia" by V.I.A. Negrescu. Reviewed by M.S. Belen'kii. Zdravookhranenie 5 no.4:57-59 J1-Ag '62. (MIRA 15:9)

1. Zaveduyushchiy reumatologicheskoy klinikoy Ukrainskogo nauchno-issledovatel'skogo instituta kurortologii i fizioterapii.

(MOLDAVIA—HEALTH RESORTS, WATERING-PLACES, ETC.)
KURKUDYM, F.Ye., dcts., otv. red.; BELEN'KIY, M.S., red.; KARAYEV, R.G., red.; KENTSH, V.V., red.; SOKOLOV, A.V., red.


(MIRA 18:7)

1. Ukrainskiy nauchno-issledovatel'skiy institut kurortologii i fizisterapii.
Belen'kii, M. S.


The Ph ester, m. 108-109°, is prepd. by heating 2,4,6-(O,N)C₆H₄COCl with PhOH in pyridine. Nitration of the Ph ester under different conditions gives the following esters: 2-m-nitrophenyl, m. 109-110°; 2,4-dinitrophenyl, m. 108-9.5°, and 2,6,8-trinitrophenyl.

R. C. A.
Formation of threadlike crystals of metallic silver on the surface of charcoal. M. S. Behrens. Colloid J. (U. S. N. R.) 2, 233-7(1950).—Thread- and needle-shaped crystals of Ag with a silvery or even golden hue, with length up to 5 cm. were formed by reducing AgNO₃ with dil. H₂ or acetyl alc. in the dark over a period of several days. One-dm. alc. gives large crystals. In the absence of charcoal no crystals are formed. F. H. R.
Physicochemical characteristics of lubricating oils.

The heat effect for cast iron and steel was constant, regardless of the degree of oil refining. The coefficient of friction increased with the degree of refining. The static coefficient of friction was 0.1 for iron and 0.02 for cast iron. The dynamic coefficient of friction was 0.05 for iron and 0.03 for cast iron.

The study was conducted with the following systems: (1) 1.2% HCl, 8% gummera clay; (2) 0.5% HCl, 8% gummera clay; (3) 0.5% HCl, 5% gummera clay; and (4) 0.5% HCl, 8% gummera clay. The coefficient of friction increases with reduction in the oil content. Increase in the composition of the reducing agent lowers the tension on the interface with water or KCl mixture and lowers the coefficient 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 the interface with water or a strong electrolyte (KCl) may serve as a criterion of the degree of refining and also in some extent of the lubricating qualities.

H. Z. Kamilev
Reduction of silver ions from aqueous solutions by a ternary mixture of alcohols. M. S. Belen'kii, Zh. Vses. Soyuza Chem. (U. S. S. R.)

It is suggested that Ag ions be reduced from AgNO₃ solutions by a ternary mixture of higher alcohols, e.g., octyl alcohol and acetone, in the presence of pyridine. It is supposed that Ag ions are adsorbed on different points of the C surface from which they picking up ions.

J. J. Bikerman
Effect of thermal treatment and methods of preparation of the aluminum support on the catalytic properties of mono-
ferrocenocatalysts. M. S. Belen'kii, N. G. Kuz'micheva, and

A catalyst for aromatization of hydrocarbons was made from Al₂O₃,
which was obtained from an alumina hydroxy hydroxide by treatment
with HNO₃, washed free from NO₃⁻, dried below 100°, mixed
with dil. HNO₃, shaped, thermally treated, and impregnated
with MN. If the Al₂O₃ 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 Al₂O₃ is an active catalyst
component in the mixed catalyst. Impurities in Al₂O₃ affect
catalyst activity, coke formation, and the course of the
reaction.

W. N. Stepenov.

In 0.01N salt solutions, adsorption was observed to be second order with respect to salt, and the reaction was first order with respect to carbon. The rate constant for adsorption was found to be 0.0165 N/mole * hr.

After 10 min, the amount adsorbed reached a steady state, and the reaction was found to be first order with respect to salt. The rate constant for adsorption was found to be 0.0165 N/mole * hr.

R. T. Miller

[Signature]
Belen'kiy, M.S.; Kuzyatina, N.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 l no.10:87-93 '58. (MIRA 12:4)

1. Azerbaydzhanskiy industrial'nyy institut imeni N.Azizbekova. (Catalysts)
INVESTIGATIONS IN THE FIELD OF ADSORPTION OF SALTS BY ACTIVATED CHARCOAL. ADSORPTION KINETICS OF SILVER IONS BY ACTIVATED CHARCOAL FROM ALCOHOLIC AQUEOUS SOLUTIONS

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

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 1 and 3 from an aqueous solution as well as alcoholic aqueous solutions with
Investigations in the Field of Adsorption of Salts by 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 \( \text{Ag}^+ \) 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
Investigations in the Field of Adsorption of Salts by 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 isosamyl-alcohol solution before and after adsorption showed that the presence of \( \text{AgNO}_3 \) (0.015 n) does not noticeably affect the tension mentioned (Table 1). But the presence of \( \text{AgNO}_3 \) 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 obshchej khimii (Azerbaijshan Institute of Petroleum and Chemistry, Chair of General Chemistry)

SUBMITTED: May 20, 1958

Card 3/3
ALKHAZOV, T.G.; BULN'KEV, M.S.

High-temperature catalytic oxidation of carbon monoxide. Izv. vyssh. ucheb. zav.; neft' i gaz 2 no.6:59-63 '59. (MIRA 12:10)

1 Azerbaydzhanskiy institut nefti i khimii im. M. Azizbekova.
(Carbon monoxide) (Oxidation)
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.11:83–87 159.

(Carbon monoxide) (Alumina) (Iron oxide)
AUTHORS: Akhundova N. A., Belen'kiy M. S.

TITLE: Oxidation of Carbon Monoxide on Spinels at High Temperature

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Neft' i gaz, 1960, No. 12, pp. 73 - 76

TEXT: In this paper, catalytic activity of spinels 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 synthetized 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 spinels 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
Oxidation of Carbon Monoxide on Spinel Catalysts at High Temperature

constant of the reaction on the MnFe$_2$O$_4$ catalyst were also studied. The oxidation of carbon monoxide on MnFe$_2$O$_4$ is a first-order reaction with respect to CO. Long-time annealing of manganese ferrite at 900°C reduces its activity with the activation energy rising from 5 to 6 up to 6.4 kcal/mole. At 200 to 300°C, the activity of the catalyst is considerably decreased, and at 400°C and more it is lower by 7.0 to 1.5%. The oxidation degree of CO at 400 to 500°C even at a volumetric 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'KII, M.S.

Electric and catalytic properties of alumina-iron oxide catalysts. Izv.vys.ucheb.zav.; naft' 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.; neft' i gaz 3 no.8: 87-93. 1960. (MIRA 14:4)

1. Azerbaydzhanskiy institut nefti i khimii imeni M. Azisbekova. (Iron oxides)

(Carbon monoxide)
BELEN'KIIY, M.S.; ALKHAZOV, T.G.; MAL'YAN, A.N.

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

1. Azerbaydzhanskiy institut nefti i khimii imeni M.Azizbekova. (Carbon monoxide)
AKHUNDova, N.A.; HELEN'KY, M.S.

High-temperature oxidation of carbon monoxide with spinels.
Izv. vys. ucheb. zav., neft' i gas 3 no.12:73-78 '60.

1. Azerbaydzhanskiy institut nefti i khimii imeni M. Azizbekova.
   (Carbon monoxide) . (Spinel group)
   (Oxidation)
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 of oxygen and carbon monoxide on the electrical conductivity of iron oxide. Concentrations of oxygen and carbon monoxide far in excess of those required for monolayer formation were formed from a fine powder of iron oxide. The specimens were formed from a fine powder of iron oxide as pellets under 2000 atm pressure, being 16.1 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.
Influence of oxygen and carbon... 

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$_2$O$_3$ and Fe$_3$O$_4$. 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.
Influence of oxygen and carbon ...

There are 5 figures and 8 references: 7 Soviet-bloc and 1 non-Soviet-bloc. The English language reference reads as follows:

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

SUBMITTED: November 10, 1960
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. zav. neft' i gaz 5 no.9:63-69 '62. (MIRA 17:5)

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

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


TEXT: Catalysts were made by the decomposition of "pure" Fe(NO₃)₃. Separate portions of the iron oxide obtained were impregnated with calculated amounts of LiNO₃ solution ("pure" grade), slightly dried and pressed into tablets under a pressure of 2600 kg/cm². The tablets were baked in air for 5 hours at 900-950°C and then broken into small pieces of 2-3 mm size. Adding small amounts of Li₂O strongly reduces the activity of the catalyst. The minimum of activity is shown in a catalyst containing 0.7% Li₂O. The introduction of Li₂O leads to a reduction in the catalyst's...
Effect of lithium oxide on the density and an increase in its specific surface area. 6 references. [Abstractor's note: Complete translation.]
ELEN', K.I.Y., M.S.; ALKHAZOV, T.G.; POSTMEYN, 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. Azorbaydzanskiy institut nefti i khimii imeni N. Azizbokova, kafedra fizicheskoy khimii.
(Charcoal) (Adsorption) (Nitric acid)
AUTHORS: Sultanov, M. Yu., Belen'kiy, M. S.

TITLE: Oxidation of CO and high-degree oxidation of n-heptane on a copper-chromium oxide catalyst 2CuO·Cr2O3


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 - 5.5 mm. At a volume velocity of 52000 hr⁻¹ 85 % CO was oxidised at 280°C and 80 % n-heptane at 350°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
Oxidation of CO and high-degree oxidation ... 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 nefti i khimii im. M. Azimbekova (Azerbaijhan Institute of Petroleum and Chemistry imani M. Azimbekov)

SUBMITTED: July 17, 1962
HELEN'KIV, M.S.

"Health resorts in Moldavia" by V.IA.Negrescu. Reviewed by M.S.Belen'kii. Vop.kur., fisioter. i lech.fiz.kul't. 28 no.1187-88 '63. (MIRA 16:4) (MOLDAVIA—HEALTH RESORTS, WATERING PLACES, ETC.) (NEGRESCU, V.IA.)
ALKHAZOV, T.G.; BELENIKИY, 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. Azerbaydzhanskii institut nefti i khimii imeni M. Azizbekova.
HELEN'KIY, M.S.; ALKHAZOV, T.G.

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

ACCESSION NR: AP4019335  S/0152/64/000/002/0049/0054

AUTHOR: Alkhazov, T. G.; Belen'kii, M. S.; Motyakova, R. I.; Khitayeva, 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 450-500°C, 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-
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 450°C), 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 550°C, 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 (Azerbaijan Petroleum and Chemical Institute)

SUBMITTED: 22Nov63 DATE ACQ: 27Mar64 ENCL: 00

SUB CODE: CH NO REF SOV: 003 OTHER: 005
Possibility of obtaining isoprene by the oxidative dehydration of isoamylene. Izv. vyss. zav. neft' i gas' 7 no.6v45-48 164. (MIRA 17:9)

1. Azerbaydzanskiy institut nefti i khimii imeni Azizbekova.
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-O '63. (MIRA 17:9)

1. Iz revmatologicheskoy kliniki (zav.- M.S. Belen'kiy) Ukrainskogo instituta kurortologii i fizioterapii (dir.- dotsent F.Ya. Kerkudym).
The possibility of preparing isoprene by the oxidative dehydrogenation of isoamylene

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

Topic Tags: Isoprene, butadiene, isoamylene, 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 isoamylene (prepared from isoamyl alcohol) by passing a mixture of isoamylene and air over an immobile catalyst layer ($\beta,\beta'$-hydroxy-dipropionitrile on diatomaceous earth) under varying conditions of flow rate and temperature (450-565°C). 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 560°C without a carrier and at relatively rapid rates of flow. Orig. art. has: 3 figures and 1 table.
VARTANOV, A.A.; ALKHAZOV, T.G.; BELEN'KIY, M.S.

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

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

Effect of isobutylene on the oxidative dehydrogeration of butylenes. Izv. vys. ucheb. zav.; neft' i gaz no.2:82,88 '65.

VARTAKOV, A.A.; BELEN'NY, M.S.; ALKHAZOV, T.G.

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

BELEN'KIY, M.S.


SO: U-3042, 11 March 53, (Letopis 'rykh Statey, No. 9, 1949)
BELYANKY, M.S.

Differential diagnosis of brucellous sacroiliitis. Sovet. med. 16 no. 3-38 Mar 1952.

1. Odessa.
Localization of damages of the muscles and ligaments in brucellosis.

1. Of the Rheumatological Clinic, Ukrainian Institute of Health Resort Therapy (Director — A. I. Sokolov), Odessa.
BRIAN'KITY, M.S.


(MARTHS, MEDICAL AND SURGICAL USES OF)
Title: Development of a Method for Rapid Evaluation of the Quality of Activated Pyrolusite

Abstract: There is proposed a rapid method for evaluating the quality of activated pyrolusite (GAF) based on the dependence of the thermal effect (TE) of the reaction taking place in a galvanic cell upon the quality of GAF. 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 GAF is provided by the amount of heat generated within 10-16 minutes.
BARLENYKIV, MORSEY SANOVLOVICH

BARLENYKIV, Vasya Sanovlovich, TURKO, Boris Pavlovich; SHPIL'BERG, Grigoriy Ioannovich; KINICHINSKIY, A.P., redaktor; LOKHMYATY, Ye.O., tekhnicheskiy redaktor

94 p.

(ODESSA PROVINCE—HEALTH RESORTS, WATERING PLACES, ETC.)
BALEN'KII, M.S.; RYBCHINSKAYA, Ye.K.

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

1. Iz revmatologicheskoy kliniki (zav. M.S.Balen'kii) Ukrainskogo institute kurtortologii.
   (ARTHRITIS, RHEUMATOID, therapy,
   ACTH with balneother. (Rus))
   (BALNEOLOGY, in var. dis.
   rheum. arthritis, with ACTH (Rus))
   (ACTH, therapeutic use,
   rheum. arthritis, with ablnaether. (Rus))
Combined mud and butadione therapy in nonspecific infectious polyarthritis. Vrach. delo no.1:7-9 '59. (MRIA 12:4)

1. Revmatologicheskaya klinika i biokhimicheskaya laboratoriya Ukrainskogo instituta kuretologi.
   (PYRAZOLIDINEDIONE) (RATHS, MOOR AND MUD) (ARTHITIS, RHEUMATOID)
BEIEN'KIY, M.S. (Krivoy Rog)

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

1. Четвертый протовтуберкулезный диспансер, Krivoy Rog. (BRONCHITIS)
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 Jul-Aug '61.

(MIRA 15:1)


(ARTERIES _ INFLAMMATION) (EXERCISE THERAPY)
(DIATHERMY) (BATHS, MOOR AND MUD)
Some unresolved problems of mud bath therapy. Vop. kur., fizioter. lech. fiz. kul't. 26 no. 5, 391-395 S-0 '61. (MIRA 14:11)

1. Iz Ukrainskogo instituta kurortologii i fizioterapii (dir. - dotsent' F. Ye. Kurkudym).

(BATHS, MOOR AND MUD)
Belen'kiy, M.S.; Zybina, M.A. (Krivoy Rog)

(MIRA 15:2)

1. Onkologicheskiy dispens, Krivoy Rog.
(STOMACH--TUBERCULOSIS)
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 reumatologicheskoy kliniki i biokhimicheskoy laboratorii Ukrainskogo instituta kurologii i fizioterapii (direktor dotseent 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 catalysts 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. Azerbaydzhan'skiy institut nefti i khimii imeni M.izbekova.

"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.
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'KII, M. Ya., kand. fiziko-matematicheskih nauk

Approximate solution of lock filling and emptying equations.
Trudy LIVTI no. 8:3-8 '60.
(MIRA 15:2)
(Locks (Hydraulic engineering))
BELEN'KII, M.Ya., kand. tekhn. nauk; FEVZNER, S.M., inzh.

Solving differential equations for the curve of a scionson
arch type structure of general form. Trudy LIIT 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)
Crack as a source of vitamin A. N. I. Kishnik and E. S. Shekhterov. Svet. Fiziol. Zh. 1920, 5, 61-65; Kshin. Refract. Zh. 1929, No. 12, 40. — Crack flour is a valuable source of vitamin A for chicks. Add to the flour in amounts of 0.5 and 1% protected the chicks from avitaminosis; 0.3% addition was insufficient. Xerophthalmia could be cured after 11-14 days by 3% of the flour in the diet.

W. R. Henr
HELEN KIY, N.A.

Simplified saliva pump. Stomatologia no. 5:50-51 8-0 '54.

(DENTISTRY, apparatus and instruments,
salivary ejector)

(SALIVA,
salivary ejector)
"A Portable Oscillograph," N. D. Belen'kiy, 2 P.
"Zavod Lab" Vol. XIV, No. 12.

Moscow Mech Technicum has produced two experimental batches of the PO-4 portable four-trace oscillograph, designed by Ye. S. Borisevich, and has begun series production. Describes apparatus. Includes photograph.
The design of a tensile-testing machine constructed in the U.S.S.R., is considered.—6. E.
BELEN'KIY, N. D.

"Contemporary Agents for Transfusion and Indications as to their Medical Application," Khirurgiya, 1952, No. 11
BELEN'KIY, N. G.

BELEN'KIIY, N. G., Kuznetsov, I. M., and Vesstigneyev, S. N.


S0 U-3264, 10 April 1953, (Letopis 'Zhurnal 'nykh Statey, No. 3, 1949)
BELEN'KII, N. G.

HELEN'KIY, N. G.


N. F. Gamaleya, Hon. Mem., Acad. Sci. USSR.
BELEN'KIY, N.I.


So: U-3042, 11 March 53, (LETOPIS 'NYKH STATEY, No. 9, 1949)
The utilization of the blood of farm animals...N.A.
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 experimental
animals
were rabbits and dogs. In the course of blood regeneration
after quantities of blood have been withdrawn, large
quantities of hemoaerit substances are formed. The
largest quantity of these substances is formed 24 hrs. after
60% removal of the blood from cattle. The speed of regen-
eration of blood in dogs and rabbits under the influence
of the hemoaerit 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
The physiology of protein nutrition of the animal organism. N. G. Belen'kov. "Biologiya Tsvetov. Otechestvennye Klassy" (1960).—Blood serum of meat animals treated by none-pharmacological methods was tried as a source of protein in 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 washed-over serum of animal blood may be used effectively for intravenous injection whenever necessary.

J. S. Jude
Physiology of parenteral protein nutrition. N. G. Belen'.
In: Uspekhi Sovremennoi Biol. 30, 40-47(1960).—Clinical
and exp. results are reviewed. 27 references.
Julian V. Smith
BELYAKIY, N. G.

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

SC: MLRA. June 1952
Belenky, N. G.

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

"Parenteral Protein Nutrition of Man and Animals, by N. G. Belen'kii.\textsuperscript{(p. 156)}
by Simonyan, K. S.

IELNYKIV, N. G.

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

SO: MLRA. August 1952
BELENIKIY, N.G., akademik.

"Blood serum transfusion in animals (species nonspecific serum)."
N.G. Belen'kii, Reviewed by B.N. Sofronov. Zhur.mikrobiol.epid.immun. no.5:114-116 My '55. (MLRA 8:7)
(ALLERGY)
(BLOOD--TRANSFUSION)
(Belen'kii, N.G.)
A study of the circulation of the proteins of curative serum by means of radioactive iodine (iodine 121). N. G. Bel'nik, N. N. Krylova, I. I. Chernikov, and L. D. Zoeva. "Zaveddy Vsesoyuzn. Akad. SF Reakh. Nauk no. V. I. Lenin 20, No. 4, 34-6 (1955)." The curative Bel'nik 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. Inde

APPROVED FOR RELEASE: 06/06/2000    CIA-RDP86-00513R000204310003-8
USSR/Farm Animals, General Problems

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

Author: Balanadiy N.G.
Inst: Not Given
Title: On the Increase of the Vitality of the Animal Organism (O povyshenii zhiznennosti zhivotnogo organizma)

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

Abstract: The experiments carried out in the Kazakh SSR demonstrated that, following the injection of non-specific serum, the activity of semen was increased, on the average, by 37%, the volume of ejaculate 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 sovkhoz "Pustovoe", 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.
USSR/Human and Animal Physiology - (Normal and Pathological).
Blood, Blood Transfusion and Blood Substitutes.

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

In the problem of obtaining animal blood as a substitute for human blood it is important to evaluate the proteins of these preparations, as to the time they would circulate in the vascular system and the degree of their assimilation. For this purpose, methionine-\(^\text{\(14C\)}\) was used. It was introduced into the protein in rice by injecting it into the vein of the animal whose blood was later used as raw material to obtain blood substitutes. A 180-kg bull was injected intravenously with methionine-\(^\text{\(14C\)}\) at the rate of 1.7 mg. The intervals between the injections were kept for 24 hrs. Once the blood of the different organs and parts of the body were examined for \(^\text{\(14C\)}\) content. The dose injected was equal to 25,000 impulses/min. of \(\text{g. of wt.}\). The rabbits received a total activity of 300,000 impulses/min. of \(\text{g. of wt.}\) in 1 injections. After 24 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% CCl3COH. The pptd. proteins were freed of lipides by extracting them with alc. for 22-24 hrs. and washing with alc. and ether and finally with ether only. When dry, the proteins were ground and radioactivity was detected. About 10% of the injected activity could be recovered after 24 hrs. The highest specific radioactivity was found in the kidneys, liver, small intestines, pancreas, the smallest in muscles, skin, and erythrocytes. The highest alca of radioactive methionine accumulated in the proteins of muscles, blood, and liver. The central nervous system had a rather small amount of methionine-\(^\text{\(14C\)}\).

I. S. Ioffe

(MLRA 9:12)

1. Moskovskiy khimiko-teknologicheskii institut myasnoy promyshlennosti.
   (Nervous system) (Metabolism)
HELEN'KII, N., akademik; KRYLOVA, N., kandidat biologicheskikh nauk; POMERISKAYA, L., kandidat biologicheskikh nauk; CHERTKOV, I., kandidat meditsinskikh nauk.

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

(BLOOD PLASMA SUBSTITUTES)
Separating blood plasma in medium and small meat combines. Mias. ind. SSR, 27 no. 2:10-11 '56.

(RBCD PLASMA) (SEPARATORS (MACHINERY))


Inst: All-Union Academy of Agricultural Sciences.

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


Abstract: During a period of 6 days, 26 rats of 180-200 g body weight each, received daily 10 g of beef meat with methionine-$S^{35}$ proteins. Seven control rats were given raw ground meat. Nine rats were fed ground meat which has been heated in an ultrathermostat at $80^\circ C$ for one hour, and 10 rats

Card: 1/2
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 plasma and livers, and their radioactivity was determined. The assimilation of proteins in their natural state as compared to those denaturized 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 denaturized proteins. Also, it was established that the degree of denaturalization does not exert any specific influence upon protein assimilation.
<table>
<thead>
<tr>
<th>Country</th>
<th>USSR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
<td>Farm Animals.</td>
</tr>
<tr>
<td></td>
<td>General Problems.</td>
</tr>
<tr>
<td>Abs. Jour</td>
<td>Ref Zhur-Biol., No 21, 1953, 96815</td>
</tr>
<tr>
<td>Author</td>
<td>Belen'ykiy, N. G.</td>
</tr>
<tr>
<td>Institut.</td>
<td></td>
</tr>
<tr>
<td>Title</td>
<td>Using the Blood of Slaughtered Animals as Fodder.</td>
</tr>
<tr>
<td>Orig Pub.</td>
<td>Vestn. s.-kh. nauk., 1957, No 12, 112-116</td>
</tr>
<tr>
<td>Abstract</td>
<td>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 preserved blood during a 109 day period. The daily weight gain in swine which received blood preserved in quick-lime (150-250 g instead of the corresponding amount of vegetable protein) was 18 percent higher than in controls. Those animals which received blood preserved in formic acid, increased their gains by 13 percent, and</td>
</tr>
<tr>
<td>Card</td>
<td>1/2</td>
</tr>
</tbody>
</table>
Abstract: those which received blood preserved in sulfuric acid and salt, by 8 percent.

1. Vesesoynyy naukho-issledovatel'skii institut myasnoy promyshlennosti.

(Meat) (Proteins)
22 no.8:3 '57.

1. Moskovskiy teknologicheskii institut myesnoy i moloknoy
promyshlennosti.

(Sterility in animals) (Cows)