

MOLODAVER, B.L.; KHALETSKIY, A.M.

Chemistry of pyrazolidine. Part 7: Sulfonation of 3,5-dioxo-
pyrazolidines with pyridine sulfotricoxide. Zhur. ob. khim.
34 no.7:2397-2402 71 '64 (MIRA 17:8)

1. Leningradskiy khimiko-farmatsevticheskiy institut.

McIlwaine, I. I.

Phys Apparatus for determining the viscosity of small quantities of a liquid. *I. I. McIlwaine. Zavodskaya Lab. 22, 745 (1966).* — An apparatus is described for the rapid approx. detn. of viscosity of a small liquid sample by measuring the time required for a liquid droplet to move down an inclined plane. *I. I. McIlwaine*

SH
mgj

USSR/Cultivated Plants - Fodders.

M-4

Abs Jour : Ref Zhur - Biol., No 7, 1958, 29854

Author : Moldaver, I.I.

Inst : _____

Title : Several Results of a Winter Vetch Try-Out.

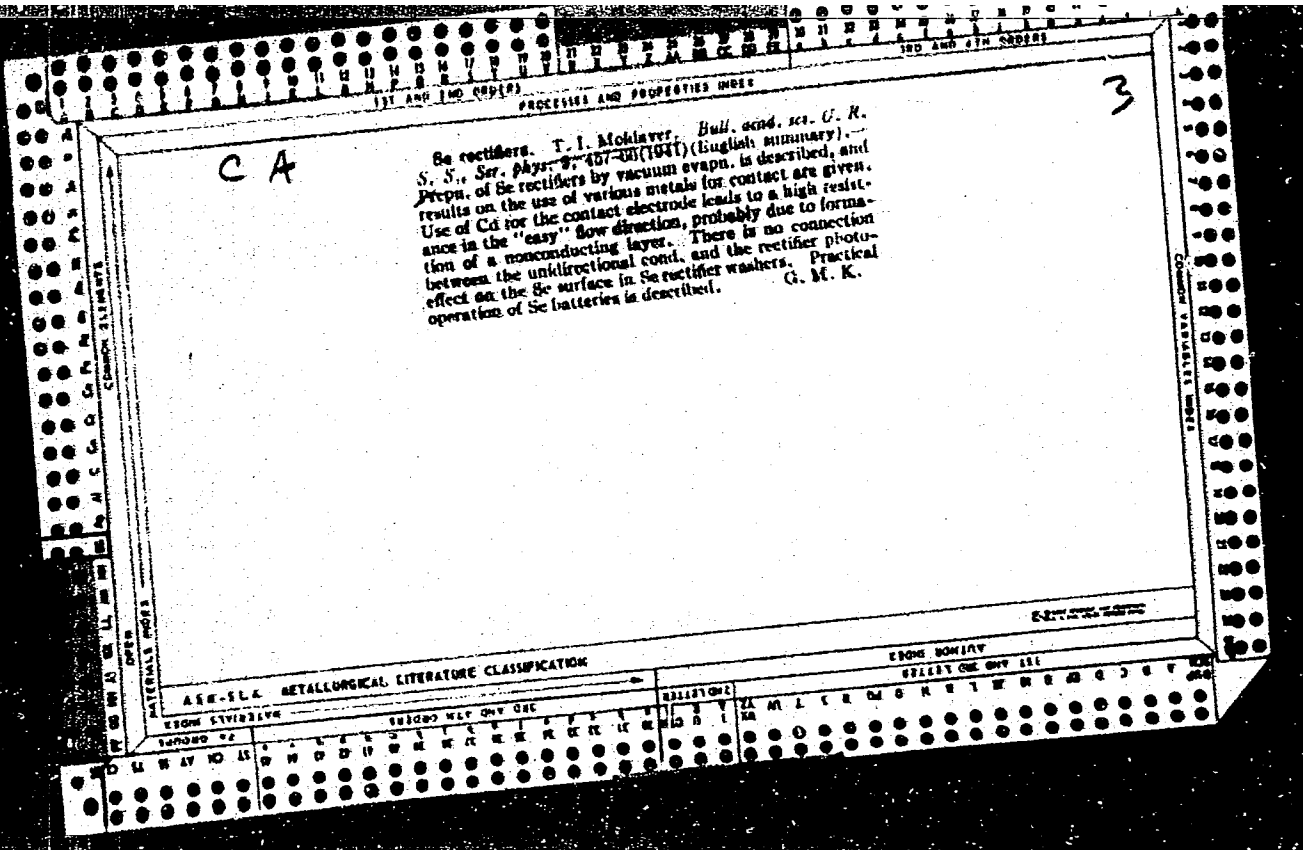
Orig Pub : Inform. byul. Gos. Komiss. po sortoispyt. s.-kh. kul'tur
pri Moskve s. kh. SSSR, 1957, No 6, 11-13

Abstract : Tests of the Ul'yanov variety Plot in Kirovogradskaya Oblast' in 1951-1956 have shown the expediency of using winter vetch as a component for winter rye or winter wheat. Good results were gotten by sowing winter vetch simultaneously with winter wheat: the average yield during the three years of the try-out totalled 239.2 centners per ha. of green stuff, or 60.7 centners per ha. of hay.

Card 1/1

MOLDAVER, S.Ye., inzhener (g Tuzmasa)

Assembling roofs of multispans industrial building having skylights.
Stroi.pred.neft.prom.l no.6:24-25 Ag '56. (MIRA 9:9)
(Skylights) (Roofs)



MOYDAVER, T.I.

Use of hydrostatic weighing. Fiz. v shkole 13 no.3:73-75 My-Je '53.
(MIRA 6:6)

1. Zaya srednyaya shkola rabochey molodezhi, g. Berdsk, Novosibirskaya
oblast'. (Specific gravity)

MOLDAVER, T.I.

Information on hardness in a physics course. Fiz. v shkole 13 no.5:48-50
S-G '53. (MLRA 6:8)

1. 2-ya srednyaya shkola, Berdsk.

(Hardness)

MOLDAVER, T.I. (g. Berdsk).

Practical demonstrations in teaching about sulfur. *Khim. v shkole*
10 no.1:36-38 Ja-F '55. (MIRA 8:4)
(Sulfur)

MOLDAVER, T.I. (gorod Berdsk Novosibirskoy oblasti)

Galvanic coating of metals. Khim.v shkole 10 no.2:52-54 Mr-Ap '55.
(Electroplating) (MLRA 8:7)

MOLDAYEV T. I.

Method
✓ Rapid Method for Testing and Correcting the Acidity of
Nickel Electrolytes. T. I. Moldayev. (Zavodskaya Laboratoriya,
1965, Bl. (3), 303). [In Russian]. A brief account is given
of a simple and rapid method for finding the quantity of acid
to be added to nickel-plating baths to maintain correct
acidity.—S. K.

WOLDAVER, T.I.; BARANOVA, A.B.

Drop method for determining the thickness of coatings. *Zav. Lab.*
22 no.5:613 '56. (MLA 9:8)

(Chemistry, Technical)

Moldaver, T. I.

USSR/ Laboratory Equipment. Apparatuses, Their Theory, Construction and Application. I

Abs Jour: Referat. Zhur.-Khimiya, No. 8, 1957, 27338.

Author : T.I. Moldaver.

Title : Instrument for Determination of Viscosity of Small Amounts of Liquids.

Orig Pub: Zavod. laboratoriya, 1956, 22, No. 6, 745.

Abstract: The main part of the described instrument is an inclined Al plate with a groove provided with divisions and numbers. The inclination angle of the plate can be varied. The tested liquid is poured into the groove at the zero division. The observation consists in reading the distance passed by the liquid in 10 sec. The instrument was checked with mixtures of nitro glue and acetone and is useful for orientation determinations.

Card 1/1

MOLDAVER, T.I.

STYSHNOV, A.I. (s.Krakovo Bashkirskey ASSR); FORTUNATOV, S.P.(g.Pyatigorsk)
MOLDAVER, T.I. (g.Berdsk); VOLKOV, V.; TRUSEV, L.G.

Letters from readers. Khim. v shkole 12 no.2:72-74 Kr-Ap '57.
(MIRA 10:3)

1. Prepodavatel' khimii 112-y shkoly rabochey molodezhi (for Volkov)
2. Uchitel' khimii Bytoshskoy sredney shkoly Dyat'kovskogo rayona
Bryanskoy oblasti (for Trusev)
(Chemistry--Study and teaching)

AUTHOR: Moldaver, T.I.

32-1-16/55

TITLE: Short Reports (5) (Korotkiye soobshcheniya).

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 1, pp. 33-33 (USSR)
Received: [unclear], 1958

ABSTRACT:

In this paper a method for the rapid determination of the quality of steel is recommended, which is similar to the already known method based upon sulfur imprints and consists in the following: From the steel rod to be investigated a piece having a length of 2-3 cm is cut off. This piece is polished by means of a grinding stone and emery paper and is then placed upon a piece of photo-paper, which is on the bottom of a bowl containing the 5% hydrochloric acid solution. The paper must be placed with its emulsion side facing upwards, and it makes no difference whether it was previously exposed to light or not. After the piece of steel has been lying on the film paper for 1 minute, it is taken away and its imprint on the paper is compared with the previously made standard. Instead of the piece of steel also the shavings of the steel sample may be used for purposes of investigation. In this case the shavings are pulverized and compressed at the end of a

Card 1/2

Short Reports (5)

32-1-16/55

china tube. With this end the china tube is placed, as described above, upon the emulsion surface of the film sheet in the bowl, so that the compressed powder enters into contact with the film. After having gained some experience it is possible, already at the first glance, to judge the quality of the sample according to the imprint obtained.

AVAILABLE: Library of Congress

Card 2/2 1. Steel-Test methods

AUTHORS: Lukin, V. V., Vaksman, S. S., Dolzhanskiy, A. I.; Berezin, V. I.,
Malkin, S. Z., Moldaver, T. I. SOV/52-24-10-65/70

TITLE: News in Brief (Korotkiye soobshcheniya)
Zavodskaya Laboratoriya, 1958, Vol 24, Nr 10, pp 1292-1293 (USSR)

PERIODICAL: V. V. Lukin (Moskovskiy inzhenerno-fizicheskiy institut) (Moscow Technological-Physical Institute) suggests a new method of de-termining the maximum plasticity of metals by the destruction of crosspieces (obtained by the drilling of two holes at the ends of the metal piece to be investigated). The crosspieces are destroyed by pressing a special instrument into the bore holes (Figure). The tests are carried out with the testing machine -5. The measurements of the crosspiece prior to and after the test are carried out by means of a metallographical microscope. The idea of this testing method comes from M. P. Markovets (Ref 1) S. S. Vaksman (Vsesoyuznyy nauchno-issledovatel'skiy institut avtogennoy obrabotki metallov) (All-Union Scientific Research Institute for the Autogenous Treatment of Metals) mentions that at this institute an electric furnace with a capacity of 15 kg was constructed for the melting of cast-iron and non-ferrous

News in Brief

SOV/32-24-10-65/70

metals. The highest operation temperature of the furnace is 1600°, the current being supplied by a transformer STE -34. A. I. Dolzhanskiy (zavod "Elektrostal'") ("Elektrostal'" Factory) wrote that the crack detector according to L. K. Tatchenko, V. V. Lyudin et al. (Ref 1) was completed. According to a suggestion by the foreman A. A. Polyakov two permanent magnets ~~BRUKI~~ were used for the holding device. V. I. Berazin, S. Z. Malkin completed the laboratory jaw crusher ~~58-11~~. To secure a higher resistivity the casing will be made of steel type St. 25-4518. The other modifications are explained by diagrams.

T. I. Moldaver (Berdskiy radiozavod) ~~Card~~ Wireless Factory) recommends the use of Teflon rings of a thickness of 2 mm in carbon analyses in ~~Mars~~ furnaces to protect the rubber sealings on the porcelain tubes.

There are 3 figures and 2 references, ~~of~~ which are Soviet.

ASSOCIATION: Moskovskiy inzhenerno-fizicheskiy institut (Moscow Technological Physical Institute); Vsesoyuznyy nauchno-issledovatel'skiy institut avtogennoy obrabotki metallov (All-Union Research Institute for the Autogenous Treatment of Metals); zavod "Elektrostal'" ("Elektrostal'" Factory); Berdskiy radiozavod

Card 2/3

News in Brief

(Berdsk Wireless Factory)

SOV/32-24-10-65/70

Card 3/3

MOLDAVER, T.I.

Central plant laboratories and safety problems. Zav.lab.
28 no.1:120-121 '62. (MIRA 15:2)
(Chemical laboratories--Safety measures)

MOLDAVER, Teodor Iosifovich; SHUSTOVA, I.B., red.

[Chemistry around us] Khimiiia riadom. Moskva, Izd-vo
"Znanie," 1964. 38 p. (Narodnyi universitet: Estestvenno-
nauchnyi fakul'tet, no.6) (MIRA 17:7)

L 65029-65 ENT(m)/EWP(s)/EWP(t)/EWP(b) IJP(o) JD

ACCESSION NR: A16021082

UR/0288/65/000/002/0151/0153
621.3.032

AUTHOR: Mohlaver, T. I.; Lifshits, A. S.

44
38
6

TITLE: Aluminizing of needles for semiconductor apparatus

SOURCE: AN SSSR, Sibirskoye otdeleniye. Izvestiya. Seriya tekhnicheskikh nauk, no. 2, 1965, 151-153

TOPIC TAGS: aluminum plating, aluminum alloy, zinc alloy, semiconductor device/VAMI plating flux, 34A plating flux

ABSTRACT: The article states that in the usual process for aluminizing these needles, they are covered not with aluminum, as assumed up to now, but with an aluminum zinc alloy. Because of its rate of diffusion into germanium, zinc has a harmful effect on semi-conductors, and the use of zinc in this process should be avoided. Aim of the work was to find a flux containing no zinc. Six fluxes were tested in aluminizing at 700C. Their designations, composition, and operating results are listed in a table. As a result of these tests, flux VAMI was selected for further experiments. Its composition was as follows: KCl: NaCl: Na₃AlF₆: 5:3:2. The flux fused well, there were many yellow sparks and aluminizing pro-
Cont 1/2

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ACCESSION NR: AP5021982

6

ceeded in a normal manner with the exception of the appearance of black films on the surface of the flux which made the operation more difficult. It is concluded that it is desirable to change from flux 34A (composition not given) to other fluxes not containing zinc. If flux 34A is used, the contact time of each part of the aluminum with the flux must be decreased. "In conclusion, we express our thanks to A. F. Gorodetskom for valuable remarks in discussion of this article."
Orig. art. has: 1 table ^{44, 55}

ASSOCIATION: Novosibirskiy elektrotekhnicheskiy institut (Novosibirsk Electro-technical Institute) ^{44, 55}

SUBMITTED: 06Jun64

ENC.: 00

SUB CODE: MM, E

NR REF SOV: 008

OTHER: 000

Card 212 mbb

MOLDAVER, T.I.; LIFSHITS, A.S.

Aluminum coating of needles of semiconductor devices. Izv.
SO AN SSSR no.6. Ser. tekhn. nauk no.2:151-153 '65.
(MIRA 18:11)

1. Novosibirskiy elektrotekhnicheskij institut.

KRUTYANSKIY, Mikhail Mironovich; NIKULIN, Aleksandr Aleksandrovich;
MOLDAVER, Valeriy Aleksandrovich; TSISHEVSKIY, V.P., red.

[Use of plasma heating systems] Primenenie plazmennogo na-
greva. Moskva, Energiia, 1964. 77 p. (Biblioteka elektro-
termista, no.18) (MIRA 17:11)

MOLDAVSKAYA, A.A.; LIFSHITS-VASIL'CHENKO, A.A.; YANCHENKO, M.K.; POLYAKOV,
I.I.; URALEVA, V.S.

Epidemic outbreak of brucellosis caused by the migration of Br.
melitensis to cattle. Zhur.mikrobiol.epid.i immun. 31 no.9:113-
117 S '60. (MIRA 13:11)

1. Iz Luganskoy oblastnoy sanitarno-epidemiologicheskoy stantsii
i Rostovskogo nauchno-issledovatel'skogo protivochumnogo instituta.
(BRUCELOSIS) (MILK—MICROBIOLOGY)

#Moldavskaya, A.S.

✓ Rancidity of cosmetic creams. A. S. Moldavskaya and
E. S. Dmitrieva. *Moskovo-Zhurnal* *Prilozh.* 20, No.
5, 18-20(1955).—The effects of light, air, and of added
eugenol-contg. essence alone or together with 0.1% propyl
p-hydroxybenzoate, 0.15% Na benzoate (I), 0.3% cinnamic
alcohol (II), 0.05% citric acid, and 0.1% ascorbic acid on
the stability and odor of cosmetic cream (III) made of
almond, apricot, and peach-pit oils have been investigated.
The data show that without added antioxidant III and these
oils can be successfully stored for 6 months in Al tubes only,
whereas III in blue or colorless glass containers exposed to
the light remained stable at the end of 6 months' storage in
the presence of added I and II only.

Vladimir N. Krukovsky

✓ Rapid method for determination of the amount of fatty acids in toilet soap. A. S. Moldavskaya and E. S. Dmitrieva. *Moskovskaia Zhurnal'naia Pisma*, 21: No. 6, 21-2 (1935).—
CH An indirect method is described for detg. the amt. of fatty acids in toilet soap (I) when Chizhova's app. for detn. of moisture in I is used. It consists essentially of 2 horizontal Al plates electrically heated to 160-170° between which I to be dried is placed in paper envelopes. Percentage of fatty acids = $100 - (x + 0.6 + 0.5 + 1.5)/1.08$, where x is percentage of moisture in I, 0.6 and 1.5 are its av. electrolyte and glycerol contents, resp., 1.08 is the transference no. for the fatty acids as detd. by the neutralization procedure, and 0.5 the ZnO content of I. The agreement between standard- and proposed-method values was well within the limits of exp't. error. Vladimir N. Krukovskiy.

(1)

MOLDAVSKAYA, E. I.

MOLDAVSKAYA, E. I.- "Overheating the Organism as an Added Factor in the Specific Cure of Early Forms of Syphilis." Molotov State Med Inst, Molotov, 1955 (Dissertations for Degree of Candidate of Medical Sciences)

SO: Knizhnaya Letopis' No. 26, June, 1955, Moscow

MOLDAVSKAYA, B.I., kand.med.nauk

Syphilitic roseola accompanied by scaling and itching. Vest.derm.
i ven. 33 no.5:88 S-0 '59. (MIRA 13:2)

1. Iz kafedry kozhnykh i venericheskikh bolezney Permskogo medi-
tsinskogo instituta.

(SKIN--DISEASES)

RYLOVA, G.I., dotsent; MOLDAVSKAYA, B.I., assistant; DMITRIYEVA, A.M.,
assistant

A case of sarcoidosis (Besnier-Boeck-Schaumann) with lesions of the
skin, lungs and bones. Vest.rent. i rad. 34 no.4:79 XI-Ag '59.
(MIRA 12:12)

1. Iz kafedry kozhno-venricheskikh bolezney (zav. - prof. P.I. Iye-
rusalimskiy) i kafedry rentgenologii i radiologii (zav. - dotsent
G.I. Rylova) Permskogo meditsinskogo inatituta (dir. - prof. I.I.
Kositsyn).

(SARCOIDOSIS radiography)

(SKIN pathol.)

(LUNGS pathol.)

(BONE & BONES pathol.)

MOLDAVSKAYA, G.Ya. & GUSAKOVA, M.P.
MOLDAVSKAYA, G.Ya.; GUSAKOVA, M.P.

Drug resistance of strains as a factor in treating dysentery patients.
Zhur.mikrobiol.epid. i immun., supplement for 1956:52-53 '57

(MIRA 11:3)

1. Iz Engel'skoy gorodskoy bol'nitsy i sanitarno-epidemiologicheskoy
stantsii.

(DYSENTERY) (BACTERIA, EFFECT OF DRUGS ON)

MOLDAVSKAYA, G. YA.

GUSAKOVA, M.P.; MOLDAVSKAYA, G.Ya.

Treatment of dysentery with small doses of synthomycin. Zhur.mikro-
biol.epid. i immun. 28 no.1:17-20 Ja '57. (MLRA 10:3)

1. Iz sanitarno-epidemiologicheskoy stantsii i gorodskoy bol'nitsy
g. Mgel'sa.

(CHLORAMPHENICOL, therapeutic use,
dysentery, bacillary, small doses (Rus))

(DYSENTERY, BACILLARY, therapy,
chloramphenicol, small doses (Rus))

MOLDAVSKAYA, G.Ya.; ASMOLOVA, Ye.P.

Diagnostic value of the opsonophagocytic reaction in brucellosis.
Lab. delo 6 no. 5:8 S-O '60. (MIRA 13:9)

1. Engel'skaya gorodskaya bol'nitsa.
(BRUCELLOSIS) (PHAGOCYTOSIS)
(OPSONINS AND OPSONIC INDEX)

YEMEL'YANOV, P.I.; MOLDAVSKAYA, M.G.; SERGEYCHEVA, T.A.; SIKORSKAYA,
Ye.G.; SHVETS, N.Ye.

Frequency of the detection of *Bacillus alcalescens*, *dispar*
and *paracoli anaerogenes* during examination for dysentery.
Zhur. mikrobiol., epid. i immun. 42 no.6:52-56 '65.

(MIRA 18:9)

1. Khabarovskaya krayevaya i gorodskaya sanitarno-bakteriologi-
cheskaya laboratoriya.

MOEDAUSKAYA, S.A., inzhener; DMITRIYEVA, Ye.S., inzhener; LUKIN, K.A., inzhener.

Complex processing of sperm whale blubber. Masl.-zhir.prcs. 17
no.8:10-13 Ag '52. (MIRA 10:9)

1. Fabrika "Svoboda."

(Oils and fats)

MOLDAVSKAYA, S.A.

2

Clarification of the sperm-whale-oil by-products with hydrogen peroxide. S. A. Moldavskaya and E. S. Dimitrieva. *Maileboina-Zhivnaya Prom.* 19, No. 2, 14-16 (1964). — Bleaching of hydrolyzed hydrogenated sperm-whale oil (I) with H_2O_2 and the subsequent sperm-fatty acids (corapn. no. 3) and spermaceti, used in the manuf. of cosmetics, is described. A mixt. made of 2.5 tons of I and an equal part of water is heated to boiling and then treated with 40% soln. of NaOH in an amt. 0.1-0.2% greater than needed to neutralize the mixt. (II). II at 80-85° is treated with 25-30% soln. of H_2O_2 at the rate of 1.4-1.5% H_2O_2 to the wt. of I and then grained, settled, etc. Good results were obtained also when 0.1-0.2% $NaHCO_3$ was added to mixt. prior to its treatment with H_2O_2 .
Vladimir N. Krukovskiy

Moldavskaya, S.A.

I-27

USSR/Chemical Technology. Chemical Products
and Their Application--Fats and Oils. Waxes.
Soap. Detergents. Flotation reagents.

Abs Jour: Ref Zhur-Khimiya, No 3, 1957, 10144

Author : Moldavskaya, S. A. and Dmitriyeva, Ye. S.

Inst : Not given

Title : Methods for the Analysis of Sperm Whale Blubber
and Its Derivatives

Orig Pub: Maslob.-zhir. prom-st, 1955, No 7, 30-32

Abstract: The acid number, saponification number (SN) and unsaponifiables content of sperm whale blubber are determined in the usual way. The saponification time is 2 hrs. The unsaponifiables (high molecular weight alcohols) are separated by extracting 5-6 times with petroleum ether. The acetyl value (AV) is determined by refluxing for 2 hrs with $(CH_3CO)_2O$ and CH_3COONa , followed by hydrolysis with 50% CH_3COOH . The SN of the acetylated product is determined in the usual way.

USSR/Chemical Technology. Chemical Products I-27
and Their Application--Fats and oils. Waxes.
Soap. Detergents. Flotation reagents.

Abs Jour: Ref Zhur-Khiniya, No 3, 1957, 10144

Abstract: The constitution of the sperm whale products is determined from nominal coefficients. The molecular weight of the fatty acid is taken to be 280; the high molecular weight alcohols are calculated on a cetyl basis; the free alcohols are determined from the formula $100 AV/197.3$. For the determination of the alcohols combined as esters, the free alcohols are subtracted from the total amount of high-molecular-weight alcohols. The wax fraction is obtained by doubling the content of combined alcohols. The triglycerides obtained from the glycerine content, assuming the analytical glycerine yield to be 10%. The following equation is used in the analysis: $110X + 200(100 - C_n - X) = 100.0O_n$, where X is the spermaceti content in %, C_n is the free alcohol content in %, O_n is

Card 2/3

USSR/Chemical Technology. Chemical Products I-27
and Their Application--Fats and oils. Waxes.
Soap. Detergents. Flotation reagents.

Libs Jour: Ref Zhur-Khimiya, No 3, 1957, 10144

Abstract: the SN of the mixture determined analytically,
110 is the SN of spermaceti (nominal), and 200
is the SN of triglycerides (nominal).

Card 3/3

MOLDAVSKAYA, S.A., inzhener; DMITRIYEVA, Ye.S., inzhener

Rancidification of cosmetic creams. Masl.-zhir.prom.20 no.5:18-20'55.
(MLRA 8:11)

1. Fabrika "Svoboda"
(Cosmetics) (Antioxidants)

MOLDAVSKAYA, S.A., inzhener; DMITRIYEVA, Ye.S., inzhener

Rapid determination of the fatty acid content in toilet soaps.
Masl.-zhir.prom.21 no.6:21-22 '55. (MIRA 8:12)

1. Fabrika "Svoboda"

(Soap--Analysis)

MOLDAVSKAYA, S. A.

Utilization of wool-fat alcohols in the manufacture of cosmetics and soap. M. V. Dmitrievskaya and S. A. Moldavskaya. *Moskovo-Zhironaya Prom.* 22, No. 8, 27 (1963). It is claimed that alc. obtained from sheep wool fat, produced in Ukrainian, Caucasian, and Moscow regions with I value 47.7-51.2, acid value 123-34, and temp. of droplet formation of 63.7-73°, were successfully used as emulsifying agents and as components of the fat base instead of beeswax.

Vladimir N. Krutavsky

MOLDAVSKAYA, S. A.

972
Protection of toilet soap against darkening. H. A. Moldavskaya, B. S. Daitrieva, G. A. Borodina, and L. M. Donetskaya (Factory "Svoboda," Leningrad). *Makuletsa-Zhivopisnye* Press. 23, No. 3, 22-B (1967).-- Toilet soap made of lard and beef-tallow developed dark spots over the surface area during storage, when contaminated with metal particles

"APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R001135010018-1

REPORT ON THE PROGRESS OF THE WORK FROM 1965
Vladimir N. Kozlov

APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R001135010018-1"

MOLDAVSKAYA, S.A.

MOLDAVSEAYA, S.A., inzh.; DMITRIYEVA, Ye.S.

Effect of perfumes on toilet soap during storage. Masl.-zhir.
prom. 23 no.9:24-27 '57. (MIRA 10:12)

L.Moskovskaya fabrika "Svoboda".
(Soap)

MOLDAVSKAYA, S.I. [Moldavs'ka, S.I.]

Method for studying the contractile actions of the uterus in situ.
Fed., akush. i gin. 19 no.4:57-58 '57. (MIRA 13:1)

1. Laboratoriya vysshey nervnoy deyatel'nosti i troficheskikh funktsiy (zav. - deystvitel'nyy chlen AN USSR prof. G.V. Fol'bert) Instituta fiziologii im. akad. A.A. Bogomol'tsa (dir. - prof. O.F. Makarchenko).

(UTERUS)

(PHYSIOLOGICAL APPARATUS)

MOLDAVSKAYA, S.I. [Moldavs'ka, S.I.]

Development of the processes of fatigue and recovery at various
moments of prolonged contractile activity of the uterus in
rabbits [with summary in English]. Fiziol. zhur. Ukr. 4 no.5t
634-641 S-O '58 (MIRA 11:11)

1. Institut fiziologii im. A.A. Bogomol'tsa AN USSR, laboratoriya
vysshey nervnoy deyatel'nosti i troficheskikh funktsiy.

(UTERUS)

(FATIGUE)

KHIL'CHENKO, A.Ye. [Khl'chenko, A.IE.]; MOLDAVSKAYA, S.I. [Moldavs'ka, S.I.]; SHEVKO, G.N. [Shevko, H.M.]

Comparative characteristics of the mobility of basic nervous processes in various analysors in man. Fiziol. zhur. [Ukr.] 9 no.4:437-442 J1-Ag '63. (MIRA 17:10)

1. Laboratory of Higher Nervous Activity of Man and Animals of the A.A. Bogomoletz Institute of Physiology of the Academy of Sciences of the Ukrainian S.S.R., Kiev.

MOLDAVSKAYA, S.I. [Moldavs'ka, S.I.]

Experimental study on prolonged uterine contraction. Ped., akush. i
gin. 20 no.5:42-44 '58. (MIRA 13:1)

1. Otdel troficheskikh funktsiy (zav. - deystvitel'nyy chlen AN USSR
prof. G.V. Fol'hort) Instituta fiziologii im A.A. Bogomolt'sa AN USSR
(direktor - prof. A.F. Makarchenko).
(UTERUS)

MOLDAVSKAYA, S.I. [Moldavs'ka, S.I.]

Relation between restorative processes in the uterus and the duration
of its activity. Fiziol. zhur. [Ukr.] 6 no.3:365-371 My-Je '60.

(MIRA 13:7)

1. Institut fiziologii im. A.A.Bogomol'tsa AN USSR, laboratoriya
vysshey nervnoy deyatel'nosti.

(UTERUS)

MOLDAVSKAYA, S.I. [Moldavs'ka, S.I.]

Influence of some hormone preparations (pituifrin and pgregnantol)
on the fatigued uterus. Ped., akush. i gin. 22 no.3:51-53 '60.
(MIRA 14:4)

I. Institut fiziologii AN SSSR im. akademika A.A.Bogomol'tsa
(direktor - chlen-korrespondent AN USSR prof. O.F.Makarchenko).
(HORMONES) (UTERUS)

KHIL'CHENKO, A.Ye. [Khil'chenko, A.IE.]; MOLDAVSKAYA, S.I. [Moldavs'ka, S.I.];
KOL'CHENKO, N.V.

Mobility of the basic nervous processes in children of various ages.
Fiziol. zhur. [Ukr.] 8 no.4:456-462 J1-Ag '62. (MIRA 18:4)

1. Laboratory of the Higher Nervous Activity of Man and Animals of
the A.A.Bogomoletz Institute of Physiology of the Academy of Sciences
of the Ukrainian S.S.R., Kiev.

KHIL'CHENKO, A.Ye. [Khil'chenko, A.IE.]; MOLDAVSKAYA, S.I. [Moldavs'ka, S.I.];
KOL'CHENKO, N.V.

Characteristics of the lability of the basic nervous system processes
in students of schools for mentally handicapped children. Fiziol.zhur.
[Ukr] 9 no.3:300-305 My-Je '63. (MIRA 18:1)

1. Laboratory of Higher Nervous Activity of Animals and Man of the
A.A.Rogomoletz Institute of Physiology of the Academy of Sciences of
the Ukrainian S.S.R., Kiyev.

L 31932-66 EWT(1) SCTB DD

ACC NR: AP5018347

SOURCE CODE: UR/0245/65/000/004/0133/0139

AUTHOR: Khil'chenko, A. Ye.; Moldavskaya, S. I.; Kol'chenko, N. V.; Shevko, G. N. 27 5

ORG: Institute of Physiology im. A. A. Bogomol'ts, AN UkrSSR, Kiev (Institut fiziologii AN UkrSSR)

TITLE: The effect of hypnopedic (natural sleep) teaching methods on the efficiency of the cerebral cortex

SOURCE: Voprosy psikhologii, no. 4, 1965, 133-139

TOPIC TAGS: hypnopedia, psychologic stress, conditional reflex

ABSTRACT: This study verifies the effect of hypnopedic teaching on the efficiency of the cerebral cortex as expressed by reactions to two sets of visual stimuli: simple geometric figures and short, written words. The experiment was carried out under standard conditions on fifteen subjects in the same age group, having the same educational background, and being taught by hypnopedic methods; a control group of fifteen subjects being taught by conventional methods was tested simultaneously. In the experiments, subjects were instructed to press buttons in response to simple geometric figures (circle, square, triangle). This test was considered to determine the responsiveness of the primary signal system. A second visual test involved pressing buttons to classify simple words according to whether they designated objects belonging to the

L 31932-66

ACC NR: AP5018347

animal, vegetable or mineral kingdom. This experiment was designed to test responsiveness of the secondary signal system. The authors took the maximum speed at which subjects made no more than three errors per fifty stimuli as a criterion for nerve responsiveness. Efficiency of the cerebral cortex was taken to stand in inverse relationship to the number of errors per set of eight hundred stimuli. Both groups of subjects were tested three times: the experimental group at the beginning of, immediately after, and a month and a half after hypnopedic; the control group before and immediately after examinations and once again a month and a half later (after rest). Reaction time of the experimental group was also tested on the same three occasions. It was found that nerve responsiveness and cerebral cortex efficiency were not significantly altered in either group in regard to the primary signal system. With respect to the secondary signal system, however, statistically significant changes were noted: nerve responsiveness was reckoned at 0.977 for the experimental and 0.970 for the control group, cerebral cortex efficiency at 0.811 for the experimental and 0.784 for the control group. Responsiveness and efficiency returned to pre-experimental levels in both groups after a rest period of one and a half months. The authors therefore conclude that two months of hypnopedic has no specific harmful effect on brain function and in particular involves no more cerebral stress than intensive study by conventional methods. Orig. art. has: 3 figures.

SUB CODE: 06/

SUBM DATE: none/

ORIG REF: 009/

OTH REF: 001

ACC NR: AT6036597

SOURCE CODE: UR/0000/66/000/000/0230/0232

AUTHOR: Kol'chenko, N. V.; Moldavskaya, S. I.; Krasnyuk, A. N.

ORG: none

TITLE: Elimination of some of the consequences of extremal factors by means of gradual acclimatization to alpine conditions (Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24-27 May 1966)

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 230-232

TOPIC TAGS: ionizing radiation biologic effect, high altitude physiology, alpine acclimatization, central nervous system, blood chemistry, hypoxia

ABSTRACT:

The effect of alpine acclimatization in stages on persons with symptoms of small doses of ionizing radiation (erythrocyte counts below 4 ml/mm^3 and decreased hemoglobin, thrombocyte, and leukocyte counts; appearance of the sympathetic asthenia syndrome; and disturbances in the functional state of higher nervous activity) was studied.

ACC NR: AT6036597

Acclimatization by stages took place at elevations of 2100 m (Terskol), 3000 m (Novyy Krugozor), 3400 m (105 Piket), and 3700 m (Ledovaya Base Camp). Studies performed included: peripheral blood indices, oxyhemography nervous process lability, and work capacity cortical neurons. It was found that phased alpine acclimatization improved hematopoiesis, vascular system function, nervous process lability, and the work capacity of cortical neurons. At 2100 m erythrocyte and hemoglobin counts decreased during the first 6 days, then began to rise. By the 10th day, the erythrocyte count had reached the preacclimatization level and osmotic resistance of the erythrocytes increased; thrombocyte and leukocyte counts rose and the granulocyte formula shifted to the left. At 3000 m, the erythrocyte count and hemoglobin reached normal values, the hematocrit erythrocyte volume increased, and osmotic resistance exceeded that observed at 2100 m. The reticulocyte count increased, the reticulocyte formula shifted to the left, and the leukocyte increase levelled off. At higher altitudes, the counts of all red blood elements, and of thrombocytes and leukocytes continued to increase. Some subjects showed mild lymphocytosis. During descent, also accomplished by stages, the amount of formed blood elements at first decreased, but began to increase during a stopover at an altitude of 2100 m.

Blood oxygen saturation varied by 1% to 2% (increasing at 2100 m and

ACC NR: ATG036597

decreasing at 3700 m and after descent to 3000 m). The AB sector of oxyhemograms fell when the breath was held. During acclimatization systolic pressure increased slightly at 2100 m. At greater elevations this index increased gradually.

By the 10th day at 2100 m, nervous process lability and cortical neuron work capacity had improved considerably in all subjects. On the 3d day at 3000 m, lability and work capacity decreased, but remained higher than initial levels (before the expedition). By the 5th day at this altitude, greatly improved work capacity and restoration of nervous process lability were seen. At 3700 m, these indices at first fell off, but were fully restored by the 5th day. After descent in stages to 2100 m, lability and neuron work capacity stabilized at levels higher than seen at that altitude during the ascent.

Thus, phased alpine acclimatization is suggested as a promising treatment for victims of mild ionizing radiation poisoning.

[W. A. No. 22; ATD Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

MOLDAVSKAYA, V.D.; TISHCHENKO, O.D.; USTINOV, A.A.; MOSHENSKAYA, F.A.; ZALKIND, L.B.;
MIKHAYLOV, A.A.; TSUKANOV, A.A.; MATSUKA, A.G.

Eradication of malaria in a city in Southern Ukraine. Med. parazit..
Moskva no.3:232-237 May-June 1953. (GLML 25:1)

1. Of the Ukrainian Institute of Malaria and Medical Parasitology
(Director -- I. A. Demchenko), Stalino and Zhdanov Anti-Malaria Stations.

MOLDAVSKAYA, V. D.

TOROPOVA, M.M.; MOLDAVSKAYA, V.D.; KONTOROVSKAYA, T.M.

Pathohistological changes in experimental malaria in chicks infected with blood and *P.gallinaceum* sporozoites. Med.paraz. i paraz.bol. supplement to no.1:33 '57. (MIRA 11:1)

1. Iz Ukrainskogo instituta malyarii i meditsinskoy parazitologii i Tsentral'noy psikhonevrologicheskoy bol'nitsy Ministerstva putey soobshcheniya
(MALARIAL FEVER IN BIRDS)

MOLDAVSKAYA, V.D.

BLITSHEYN, I.L., kandidat biologicheskikh nauk; ~~MOLDAVSKAYA, V.D.~~, professor;
RODKIN, S.V., dotsent; CHERNYAVSKAYA, F.F., kandidat meditsinskikh nauk;
LEVITAN, R.B.; GRODZINSKAYA, A.I.; OSTROMUKHOVA, B.L.

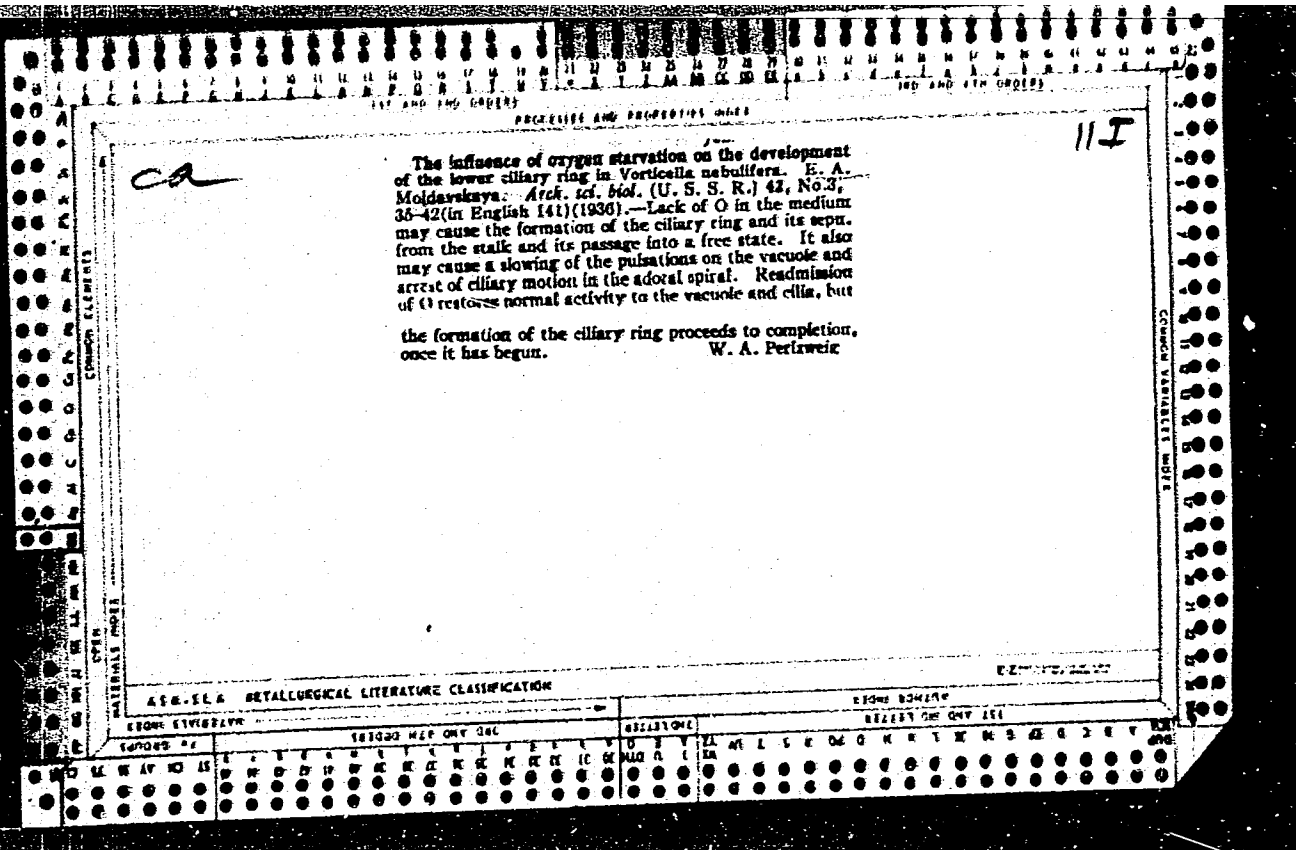
The role of *Lambli*a and *hymonolepis nana* in dysentery of young
children. Sov.med.21 no.3:22-26 M_r '57. (MLRA 10:7)

I. Iz Ukrainского instituta malyarii i meditsinskoy parazitologii imeni
prof. V.Ya.Rubashkina (dir. I.A.Demchenko), Khar'kovskogo instituta
okhrany materinstva i detstva (dir. - kandidat meditsinskikh nauk A.I.
Kornikova), detskoy bol'nitsy No.24 (glavnyy vrach L.M.Poyarkova) i
detskikh yasley No.81 (glavnyy vrach B.L.Ostromukhova) Khar'kov.

(DYSENTERY, BACILLARY, in inf. and child
in giardiasis & tapeworm infection, ther.)

(GIARDIASIS, in inf. and child
in bacillary dysentery, with tapeworm infect., ther.)

(TAPEWORM INFECTION, in inf. and child
in bacillary dysentery, with giardiasis, ther.)



PROCESSES AND PROPERTIES INDEX

11F

Handwritten mark: H

The effect of sponins on the passage of substances through the intestinal wall. E. A. Moldaykaya. *Bull. biol. med. expil. U. R. S. S. 9, 93-6 (1940) (in English).*— The introduction of solns. contg. sponins into rabbit intestines causes an increase in intestinal fluid bulk as well as

absorption. Two intestinal loops of the jejunum, each 25 cm. long, were carefully rinsed with warm saline, the fluid was removed, and the loops were tightly ligated. Into the control loop was injected 5 cc. of physiol. saline, while into the other was injected a 0.02-0.03% soln. of digitonin in physiol. saline, followed immediately by an injection into the ear of 5 g. of glucose in 10 cc. of water. After 1.5 hrs. the contents of the loops were removed and the reducing power of the solns. was detd. Loops contg. control soln. showed reducing substances equiv. to 0.7-2.1 mg. of glucose, while the soln. from the expil. loops showed 23.3-61.78 mg. of glucose, as well as a large increase in fluid vol. The addn. of the scrapings of the intestinal mucosa of a freshly killed rabbit to a control soln. contg. pure digitonin, followed by storage of the soln. at 38° for 1.5-2 hrs., caused no increase in reducing power of the soln. which indicates that the enzymic splitting of digitonin with the resultant formation of reducing substances was not responsible for the high reducing power. Thus sponins cause an increased passage of water and dissolved substances from the blood stream into the lumen of the intestine. The osmotic pressure of digitonin solns. is too low to be a factor in this process. S. A. Kartala

ASS. S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

EXTRACTED FROM

EXTRACTED FROM	EXTRACTED FROM
EXTRACTED FROM	EXTRACTED FROM

PROCESSING AND PROPERTIES INDEX

CA

11E

The physicochemical nature of bacteriolysis. V. A. Dortman and B. A. Moldavskaya. *Am. Rev. Soviet Med.* 2, 371(1945); *Sci. Cit.* 30, 4042. —The early stages of bacteriolysis are localized, probably, on the cell surface. The surface charge of bacteria before and after exposure to egg-white lysozyme was studied in Abramson's modification of the microelectrophoretic chamber of Northrop. The organisms studied were *Micrococcus lysodeikticus*, which is very susceptible to lysozyme, and *B. subtilis*, which is less susceptible. As controls for measuring the possible effect of lysozyme on electrokinetic potential in the absence of lysis, quartz particles and *E. coli* were used. The test objects were washed 3 times and suspended in 0.5% NaCl soln. and then placed in the elec. field at room temp. The initial values for the electrokinetic potential of 10 preps. of *M. lysodeikticus* were increased by 50-100% five min. after the addn. of lysozyme; 10 min. later the potential had decreased, in most cases approx. to 50% of the initial value. Lysozyme which had been inactivated by boiling had no appreciable effect on the potential of these preps. For *B. subtilis*, on exposure to active lysozyme the potential usually decreased by 10-30%; during the next 15 min. the values gradually rose toward normal. *E. coli* and quartz particles showed no consistent alteration in the potential after exposure to lysozyme. It is concluded that the initial stages of bacteriolysis, preceding visible swelling, are attended by a transient change in the elec. charge of the cell surface. The coli and staphylococcus bacteriophages exert a similar effect on the homologous susceptible organisms.

W. K. Heint

AER-514 METALLURGICAL LITERATURE CLASSIFICATION

INTERNAL INDEX

OPEN

GROUPS

SYMBOLS

ALPHABETIC

NUMERICAL

ALPHABETIC

NUMERICAL

1ST AND 2ND CODES) PROCESSES AND PROPERTIES UNCLE

CA 11C

The physicochemical nature of antibacterial action. V. A. Dorfman, E. A. Moldavskaya, T. L. Kastorskaya, and P. S. Zaypikina (Inst. Exptl. Med., Moscow). *Biokhimiya* 10, 407-23 (in English, 421-2) (1945); cf. *C.A.* 39, 2777. —The efficacy of an antibiotic on susceptible bacteria can be detected within 5-15 min. by measuring the electrokinetic potential (ζ). A rise in the ζ is obtained by using such diverse antibiotics as bacteriophage, lysozyme, penicillin, tyrothricin, and liver prepns.; it is stated that sulfa drugs also fall into this category, although no results with these compds. are recorded. Thus, the addn. of bacteriophage to *Escherichia coli* results in an immediate rise in the ζ , with a max. in 5-15 min., after which the value returns to normal. If the bacteriophage is inactivated, no rise is obtained. Similarly, no increase in the ζ is observed by using an active bacteriophage and dead bacteria. In the case of bacteriostatic antibiotics, such as penicillin, the rise in the ζ is maintained for a long time. It is suggested that the effect may be due to adsorption of the antibiotic on the bacterial surface, followed by disson. into electrically charged particles. If. Priestley

COMMON ELEMENTS

OPEN MATERIALS INDEX

ASM - S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

REGIONAL SYMBOLS

SEARCHED - 10 000 000

RECORDS

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

PROCESS AND PROPERTIES INDEX

11C

CA

The physicochemical nature of antibiotic action. V. A. Dostman, E. A. M. Moflavybay, T. I. Kastorskaya, and P. S. Zasyphina (All-Union Inst. of Exptl. Med., Physical-Chem. Lab., Moscow). *Am. Rev. Soviet Med.* 3, 611-16 (1946).—The ζ -potential of the bacteria was measured by means of the microelectrophoretic all-glass cell according to Northrop-Abramson. Migration rates are given in μ /sec. The field strength varied in individual series of expts. from 1 to 7 v./cm. The bacteria were either suspended in broth (where growth was required as with the phages) or suspended (after 2-3 centrifugations) in 0.5% NaCl, or (most frequently) in $M/15$ phosphate buffer at different pH values. Coliphage and staphylococcus phage were used in addition to the previously studied lysozyme. Lysozyme and the phages differ in chem. constitution and in the character of their lytic power. The most important difference is the fact that the phages attack only living, actively growing bacteria, while lysozymes affect dead bacteria as well. Characteristic differences may also be found in the rate of lysis and specificity of action of the 2 kinds of lytic agents. All antibiotics studied, both bacteriolytic and bacteriostatic, caused an increase in the ζ -potential of the susceptible bacterial species within the 1st min. of interaction. The ζ -effect of the bacteriostatic agents did not change with time, while that of the bacteriolytic agents was reversible. These differences in time of the ζ -effect are tentatively attributed to the more profound structural and metabolic changes of the bacterial cell as caused by the lytic agents, while the primary rise in the ζ -potential was identical in both cases. The analysis of the correlation between penicillin action and its ζ -effect suggests that the increase in the ζ -potential of the bacterial surface was due to the disarr. of some of its ionogenic groups. A method of penicillin assay depends on the fact that the threshold concn. of penicillin is indicated by the disappearance (or appearance) of the ζ -effect. The activity of penicillin detd. by this method is several times greater than that indicated by the bacteriol. titer. Fifteen references.

W. R. Henn

A.S.T.M. METALLURGICAL LITERATURE CLASSIFICATION

SECTION 100000

SUBSECTION 100000

SERIES 100000

BELKINA, A.I.; MOLDAVSKAYA, Ye.A.

Immunizing effectiveness of whole bacterial cells and of their complete antigens. Zhur.mikrobiol.apid.i immun. no.5:3-8 My '55.
(MLRA 8:7)

1. Iz Moskovskogo instituta vaktsin i syvorotok imeni I.I.Mechnikova (dir. M.I.Sokolov).

(VACCINES AND VACCINATION,

immun. properties of whole bact. cells & of complete antigens)

MOLDAVSKAYA, Ya.A., inzh; OVSEYENKO, V.V., inzh

Exploring a region of karst holes for the construction of a 220 kv.
electric power line. Elek.sta. 29 no.9:55-58 S '58.
(Electric power distribution--High tension) (MIRA 11:11)

PRIKHODCHENKO, I.A.; MOLDAVSKIY, A.M.

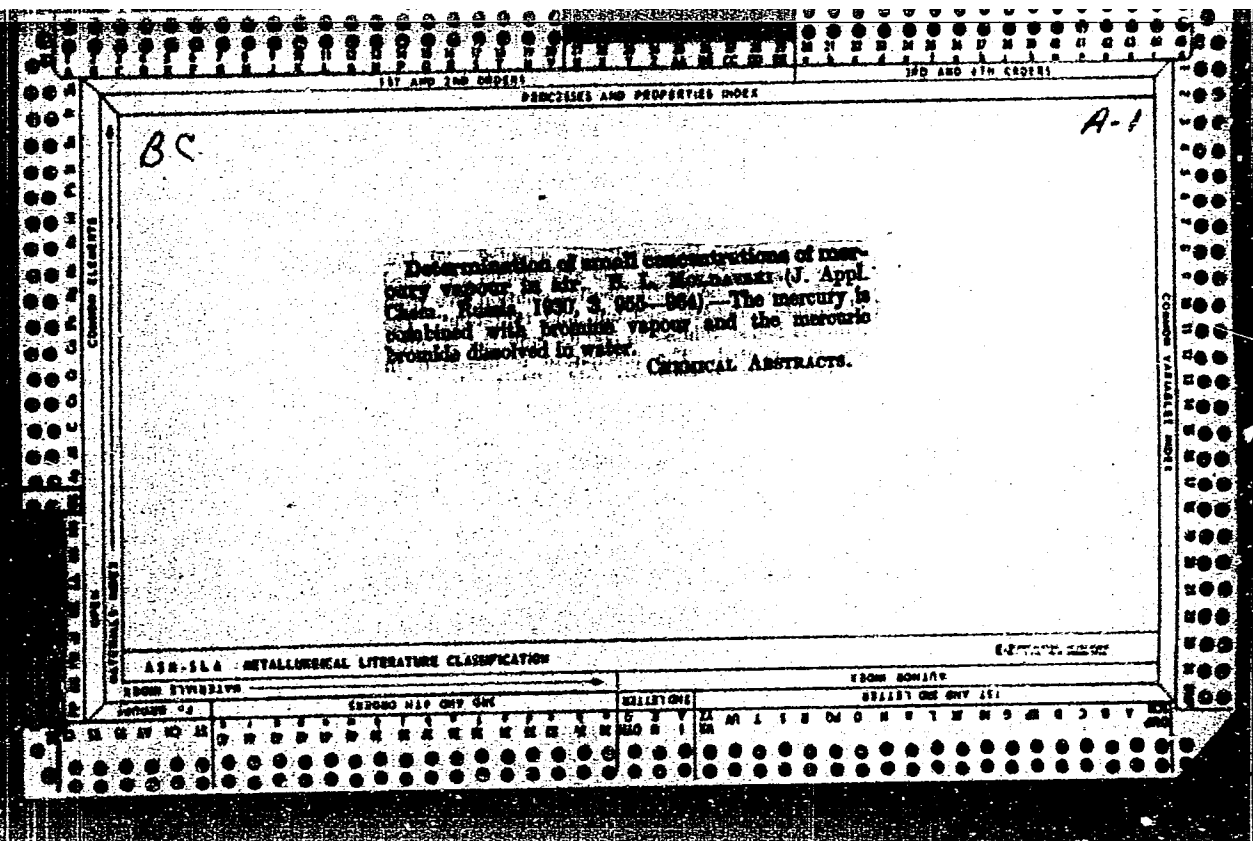
Using the new methods of operation and production planning
developed by the electric locomotive plants in Novocherkassk.
Kozh.-obuv. prom. 7 no.9:4-9 S '65. (MIRA 18:9)

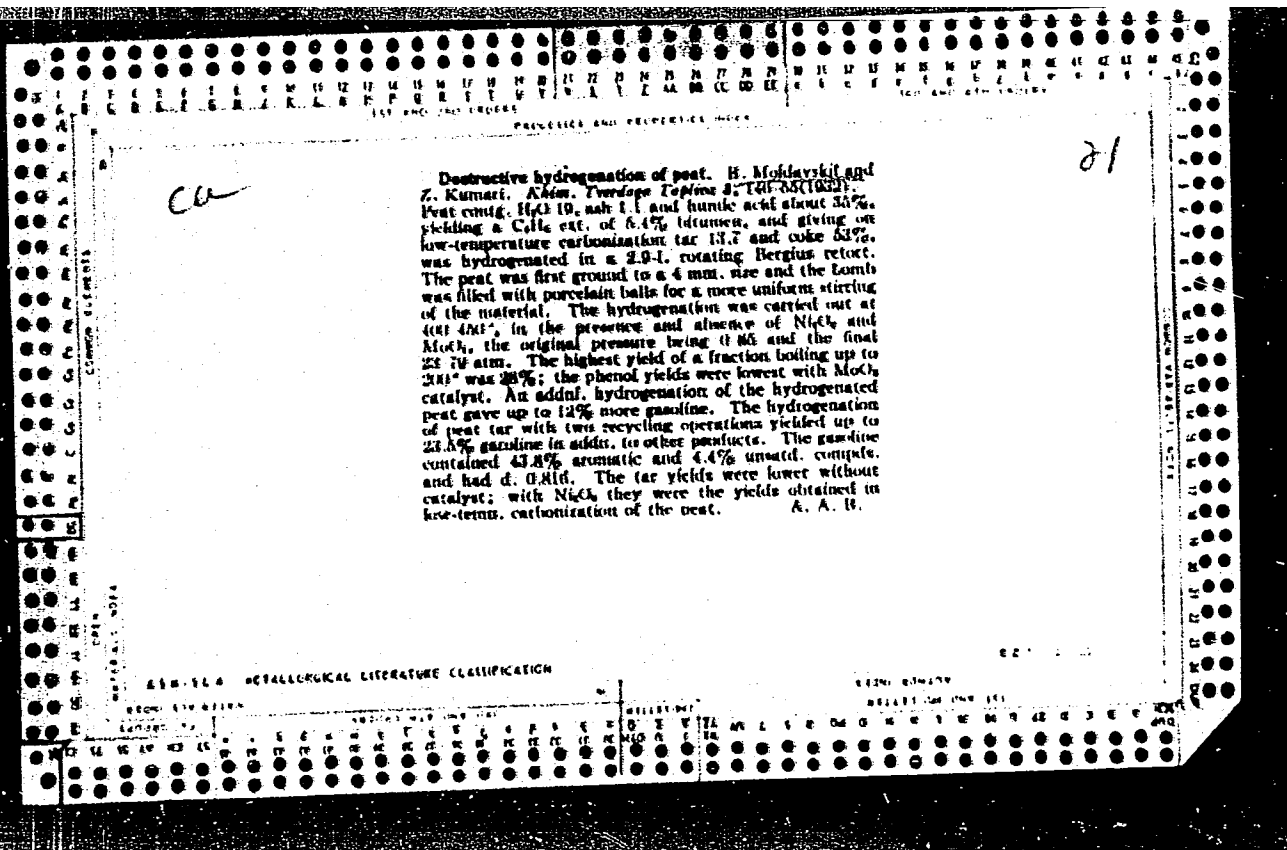
MOLDAVSKIY, A.M.

System of "closed" shifts. Leg.prom. 17 no.8:6-7 Ag '57.

(MIRA 10:10)

(Shift systems)





TEST AND PROPERTIES INDEX

PROCESSES AND PROPERTIES INDEX

22

Investigation of the Bykensk bituminous mineral. L. L. Moldavskit and S. E. Arkins. *Khim. Tverdogo Topiva* 3, 307-73 (1932).—The extr. of this mineral with C_6H_6 yielded 4.4-6.73, with CCl_4 4.32-7.0, with $CHCl_3$ 4.2 and with CS_2 4.4% of bitumen, the latter contg. 4.0% and the mineral 0.23% of S. The C_6H_6 ext. after removal of C_6H_6 was liquid at room temp. and analyzed sp. gr. 0.882, C 74.6, H 9.08, O 6.17, total S 8.1, elementary S 2.62, N 0.3, ash 1.25, asphaltenes (Marcusson) 8.44, resins 28.0 and oil 58.10%. The residue obtained after distg. off fractions b. below 280° had a sp. gr. of 1.052, Kraemer-Sarnow softening pt. 44.5°, Marcusson asphaltenes 22.0, resins 28.0, oils 46.1 and S 6.06%. The S in various cuts is tabulated. Low-temp. carbonization in a Fischer retort with steam superheated to 350° gave an oil contg. S 3.55, C 81.4, H 12.2% and sp. gr. 0.913. Destructive hydrogenation of this oil in a Bergius autoclave with 5% MoS_2 yielded 80-89.8% of liquid products, sp. gr. 0.8585, contg. S 0.46-0.77%; the yield of the fraction b. below 200° was 5.0-51.0%; its sp. gr. was 0.7403-0.7516 and the S content 0.03-0.28%; yield of the fraction b. 200-300° was 28.0-37.8%; its sp. gr. was 0.8018-0.8672 and S 0.04-0.50%; the residue had a sp. gr. of 0.9007-0.9507. The gasoline fraction was composed of aromatic compds. 0-32.20, naphthalenes 12.5-46.4, paraffins 21.4-60.0 and unsatd. compds. 0-8.5%. A. A. B.

A.S.T.M. DETAILING LITERATURE CLASSIFICATION

E.217.01.01.01

SECTION	SECTION	SECTION	SECTION
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
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77	78	79	80
81	82	83	84
85	86	87	88
89	90	91	92
93	94	95	96
97	98	99	100

PROCESSING AND PROPERTY INDEX

10

Handwritten: CN

Catalytic desulfurization of benzene containing thiophene by destructive hydrogenation. R. MOLDAVANSKI AND N. PROKOPECIUK. *J. Applied Chem. (U. S. S. R.)* 5, (10-27(1032)). C_6H_6 is not hydrogenated at 450° in the presence of MoS_2 , while thiophene is attacked. ($C_4H_4S \rightarrow C_4H_2S \rightarrow H_2S$). At 350° 90% of the C_4H_4S was already decomposed. MoS_2 changes to Mo_2S_3 which is stable. V. KALICHEVSKY

A.S.M.E.A. METALLURGICAL LITERATURE CLASSIFICATION

CLASSIFICATION	SEARCHED	INDEXED	SERIALIZED	FILED

Common Elements: A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z

Open Elements: A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z

Materials Index: A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z

Section Numbers: 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

PROCESSES AND PROPERTIES INDEX

10

Ca

Hydrogenation of oxygen-containing compounds. I. The catalytic reduction of phenol and *o*-cresol. B. L. Mandelkern and S. E. Livshitz. *J. Gen. Chem.* (U. S. S. R.) 3, 608-14(1933).—Phenol (I) and *o*-cresol (II) were hydrogenated at various pressures at 330-70° in the presence of MoS₂. The app. consisted of a Bergius autoclave rotating 50 times per min. and furnished with a thermocouple. The catalyst was prepd. by reducing MoS₂ in the autoclave with H₂ at 60 atm. and 350-60° for 6 hrs., the MoS₂ being poured from the autoclave into a vessel filled with CO₂ (freshly prepd. MoS₂ is pyrophoric) and then sieved and kept in CO₂. The MoS₂ was prepd. by satg. an NH₄OH soln. of NH₄ molybdate with H₂S and decomg. the resulting soln. with dil. H₂SO₄. Natural MoS₂ (molybdenite) was an inferior catalyst. I gave 90% PhH at 25 atm. As the pressure increased more C₈H₁₀ + C₈H₁₂ was formed (25 atm. 10%, 50 atm. 17%, 100 atm. 30%), although the ratio C₈H₁₀:C₈H₁₂ decreased. C₈H₁₀Ph (III) and *p*-C₈H₁₀C₆H₄OH (IV) were by-products. II gave similar yields of PhMe, C₈H₁₀Me, C₈H₁₂Me and a substance which is probably MeC₈H₁₀C₆H₄Me (V). No MeC₈H₁₀C₆H₄(OH)Me was found. The yields of C₈H₁₀ under given conditions were greater than those of C₈H₁₂Me. Satd. alcs. were not found. Hydrogenation of PhH and PhMe at 350° and 125 atm. with 5% MoS₂ gave only 4% conversion. It is therefore concluded that the hydroaromatic substances are formed directly from I and II.

$$\text{I} \xrightarrow{3\text{H}_2} \text{C}_8\text{H}_{10}\text{OH} \xrightarrow{-\text{H}_2\text{O}} \text{C}_8\text{H}_{10} \xrightarrow{\text{H}_2} \text{C}_8\text{H}_{12}$$

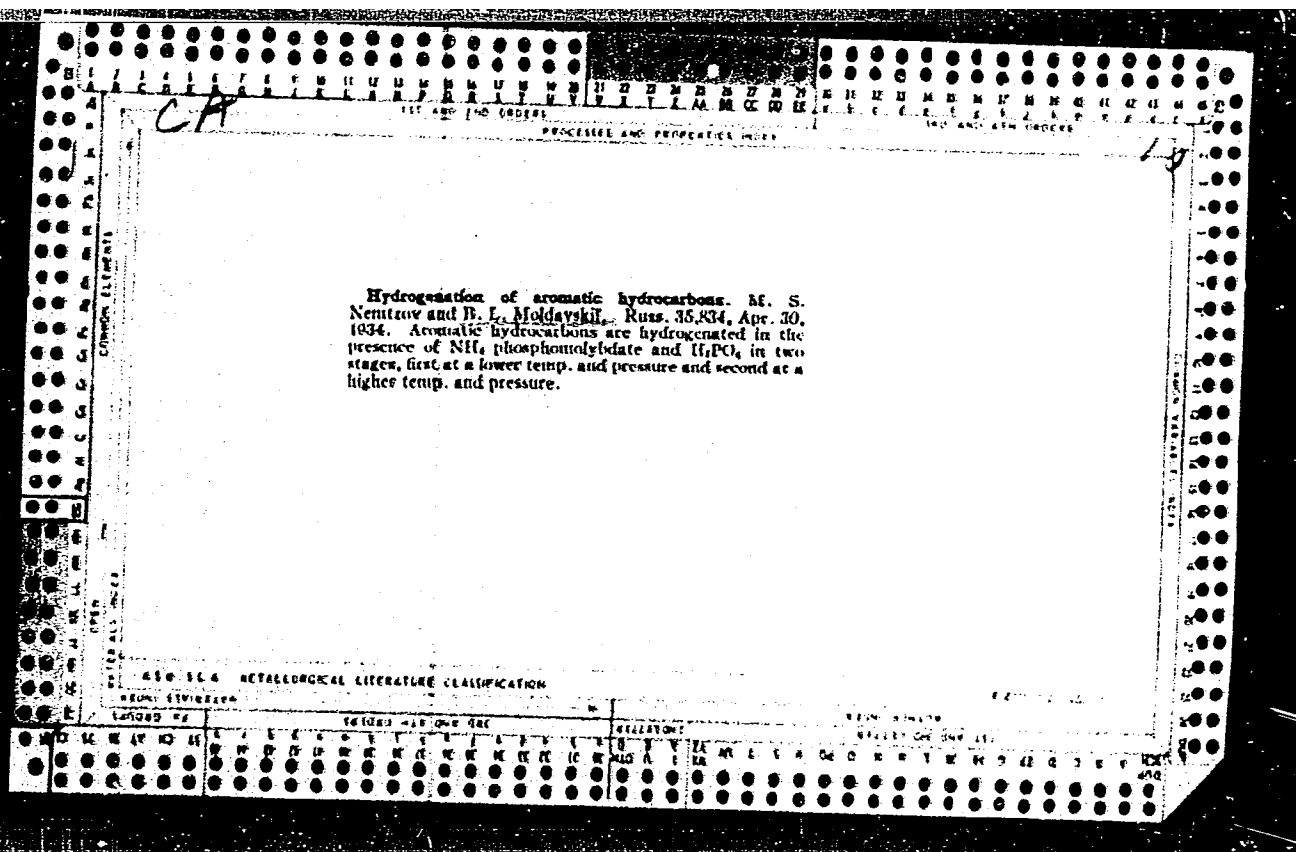
IV may arise from condensation of C₈H₁₀OH and PhOH, and C₈H₁₀Ph by hydrogenation of IV. This mechanism is supported by the observation that V is oxidized to *m*-C₈H₁₀(CO₂H)₂, since direct condensation of MeC₈H₁₀OH and PhMe would give hydrocarbons oxidizing to *o*- and *p*-C₈H₁₀(CO₂H)₂. There were calcd. the energy of activation and the temp. coeff. of av. velocity of reduction and hydrogenation of I and II for the temp. interval 330-70°.

Lewis W. Butz

A.S.T.M. METALLURGICAL LITERATURE CLASSIFICATION

COMMON ELEMENTS: A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z

INTERNAL INDEX: 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



PROCESSES AND PROPERTIES INDEX

Common Element

Common Variable Index

INTERNAL CODE

EXTERNAL CODE

Desulfurization by means of destructive hydrogenation.
B. L. Moldavskii. *Destructive Hydrogenation of Fuels*,
O. N. T. I. Goshmankhinskiy (Leningrad) I, 168-172
(1934).--A review with 61 references. A. A. R.

A.S.S.-U.S.S.R. METALLURGICAL LITERATURE CLASSIFICATION

GROUP	SECTION	SUBSECTION	CLASSIFICATION
1	2	3	4
5	6	7	8
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85	86	87	88
89	90	91	92
93	94	95	96
97	98	99	100

157 AND 158 CROSS

PROCESS AND PROCEEDING INDEX

Ca

The hydrogenation of sulfur compounds. I. The mechanism of the decomposition of thiophene over metallic sulfides in the presence of hydrogen. B. L. Moldavskii and Z. I. Kumari. *J. Gen. Chem. (U.S.S.R.)* 4: 298-308 (1934).—The mechanism of the hydrogenation and decomp. of thiophene (I) in the presence of MoS_2 was studied at various temps. and pressures. The av. velocities of hydrogenation and decomp. of I over the sulfides of Mo, Co, Ni, Mn, Cd and Cu were detd. at various temps. From these velocities were calcd. the temp. coeffs. and the energies of activation for the temp. interval 210-70°. II. The decomposition of individual sulfur compounds over molybdenum sulfide in the presence of hydrogen. *Ibid.* 307-9.—A soln. of 0.122 mole of S compd. in 25 cc. of hexane (b. 180-220°) and 1.6 g. MoS_2 was kept at 230° and the original pressure of 30 atm. for 3 hrs. Analysis of the resulting mixts. gave the percentage of substance decompd., percentage of S remaining as RSH and as R_2S , resp., as follows: $PhSH$, 93.6, 3.7, 0.0; $RiSH$, 83.0, 9.3, 8.0; $Me_2CH(CH_2)_4SH$, 69.4, 28.5, 3.4; $(EtS)_2$, 76.7, 15.0, 0.7 (as R_2S); $(Ph-CH_2)_2S$, 95.4, 2.0, 0.0; $(Cl_2CHCH_2)_2S$, 60.6, 13.4, 15.0; Et_2S , 32.0, 8.8, 46.6; Pr_2S , 26.5, 7.8, 66.4; $Me-CH(CH_2)_4S$, 26.7, 6.7, 61.2. Lewis W. Rutz

A.S.T.M. METALLURGICAL LITERATURE CLASSIFICATION

EQUIV. SYMBOLS

EQUIV. SYMBOLS

EQUIV. SYMBOLS

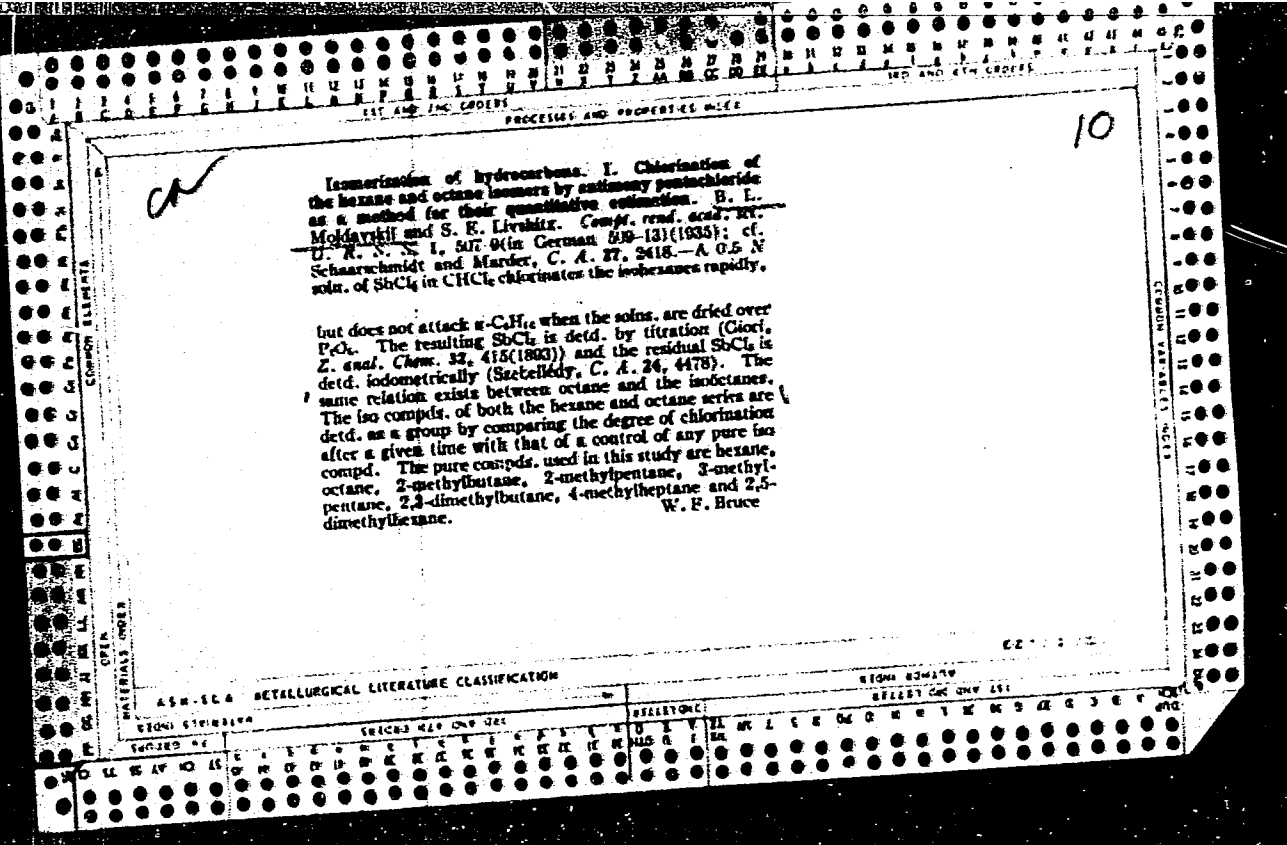
PROCESSING AND PROPERTIES MODEL

B-1-2

BCL
 HYDROGENATION OF OXYGEN-CONTAINING COMPOUNDS.
 II. REDUCTION OF PHENOLS IN THE PRIMARY TAR OF
 CHERKESHOV COALS. B. A. Meldevski and S. N.
 Livochitz (Khim. Tverdi Topl., 1934, 5, 91--96; cf.
 B., 1934, 53).--Tricresols were reduced with a cresol
 fraction (b.p. 210°) with MoS₂ as catalyst and under
 various pressures. The fraction of b.p. 90--125°
 obtained in the reduction of the hydrocarbons contained
 94% of PhMe. The higher phenols yielded a stable
 gasoline. Ch. Abs. (e)

ABR-51A METALLURGICAL LITERATURE CLASSIFICATION

SOURCE SYMBOL LUNOVS 24	SECONDARY ONLY USE S I B G T I P F P I S O R I	COLLECTION MO R I	REFERENCE ONLY USE 2A 2B 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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PROCESSES AND PROPERTIES INDEX

10

CA

Isomerization of hydrocarbons. II. Isomerization of normal hexane and octane by the action of aluminum chloride. B. L. Moldayakh, M. V. Kobul'skaya and S. E. Livshitz. *J. Gen. Chem. (U. S. S. R.)* 5, 1791-7(1935); cf. *C. A.* 29, 4731¹.—The isomerizing effect of AlCl₃ on normal paraffins was studied by treating hexane and octane with various amts. of AlCl₃, with and without the addn. of HCl, ZnCl₂, PbSO₄, and CuCl₂, at 20-90°, with shaking, and detg. the total amt. of iso compds. of hexane and octane formed by the method previously described. The isomerisation with the aid of AlCl₃ is greatly activated by HCl or by the substances capable of splitting off HCl, such as alkyl halides, compds. of HCl with anhyd. sulfates of heavy metals, etc. The reaction under these conditions proceeds at a considerable rate at room temp. In the absence of HCl or other activators, the isomerization in the presence of AlCl₃ proceeds at a marked rate only at higher temps. Chas. Blanc

ASM-SCA METALLURGICAL LITERATURE CLASSIFICATION

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PROCESSED AND RECLASSIFIED UNDER

72

ca

Refining motor fuels by hydrogenation. Stabilization of gasoline cracked in the vapor phase. R. L. Molday, V. N. Pokorakif and I. L. Anisimovskii. *Neftekhimicheskiy Zhurnal* 28, No. 2, 52-9 (1935). Translation in Foreign *Petroleum Tech.* 3, 215-40 (1935).—Vapor-phase gasoline may be stabilized by hydrogenation at a pressure of 10-40 atm. and a temp. of 320-400°, with a vol. concn. of H₂ of 3.5:1. The fine treatment is 0.1-0.5 min. and the consumption of H₂ is 0.5-1% by wt. of the stock. The following catalysts were investigated: clay, MoS₂ + clay (1:1), pumice, MoS₂ on pumice, kaolin, MoS₂ + kaolin (1:1) and MoS₂ + ZnO (1:1). MoS₂ + ZnO gave satisfactory results. The contamination of the H₂ by unsatd. hydrocarbons does not affect the hydrogenation. A. A. Koelshuek

458-5.6 DETAILING LITERATURE CLASSIFICATION

FROM DIVISION

RECLASSIFY ONE ONE ONE

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PROCESSING AND PROPERTIES INDEX

22

ca

Desulfurizing distillates of the Ishimbayev crude oil by means of hydrogenation. B. L. Moldavskii and V. N. Pokrovskii. *Neftevaee Khim.* 1936, No. 1, 44-54. — The kerosene-gasoline distillates investigated contained 0.71% S, the gasoline 0.40 and the kerosene 1.39%. The distillates were desulfurized in a continuous lab. hydrogenation app. Among the catalysts used, Cr₂O₃ was found superior to MoS₂, none of them being poisoned in the process. Desulfurization was complete at 400 °C, exposure for 8-10 sec., pressure 10-20 atm., a ratio of H₂ to the raw material 8:1 and H₂ consumption 0.2%. The product was high in aromatic hydrocarbons and lower-boiling fractions were obtained from higher-boiling material. A. A. Bochtinsk

METALLURGICAL LITERATURE CLASSIFICATION

GROUP	SECTION	SUBSECTION	CLASSIFICATION
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PROCESSING AND PROPERTIES UNIT

10

ca

Catalytic cyclization of aliphatic hydrocarbons. H. I. Moklavskii and H. Kamshar. *Compt. rend. acad. sci. U. R. S. S. (N. S.)*, 1, 356-9 (1930) (in German).—Catalytic cyclization of aliphatic hydrocarbons, without decomposition of the original mol., to aromatic hydrocarbons of the same no. of C atoms is readily effected by passing the former, contg. 6 or more C atoms, over Cr_2O_3 heated above 400° . Thus octane at 400° gives 63% *o*-xylene and a small amt. of PhEt with liberation of H_2 according to the scheme $C_{10}H_{22} \xrightarrow{PhEt} C_8H_{10} + 4H_2$. Heptane at 470° gave 30% toluene, identified as 2,4-dinitrotoluene, m. 70° ; hexane at 470° gave 17% benzene, identified as *m*- $C_6H_4(NO_2)_2$, m. 90° ; (iso-Bu)₂ at 404° gave 86% *p*-xylene, identified through the *p*- $C_6H_4(CO_2Me)_2$, m. 189° ; (iso-Am)₂ at 468° gave 82% *m*- $MeC_6H_4CHMe_2$, identified through the *m*- $C_6H_4(CO_2Me)_2$, m. 04° . The same type of cyclization has been observed in the case of olefins and aromatic-aliphatic hydrocarbons; thus octene gave *o*-xylene, and PhBu gave C_6H_6 . Cyclization was also readily effected with a Gromy benzine fraction, but the reaction was complicated by dehydrogenation of naphthenic hydrocarbons. Other catalysts studied were the oxides of Zn, Al, Th, and U, $NiCrO_4$, and MoS_2 ; only MoS_2 compared with Cr_2O_3 , but the former lost its activity more rapidly than the latter. John F. Lantz

ASB-514 METALLURGICAL LITERATURE CLASSIFICATION

C2 10 10

SEARCHED	INDEXED	SERIALIZED	FILED

PROCESSES AND PROPERTIES INDEX

10

Ca

Isomerization of hydrocarbons. III. Thermal isomerization of normal hexane and octane. B. L. Moldavskii, M. V. Kobul'skaya and B. H. Livshits. *J. Gen. Chem. (U. S. S. R.)* 6, 616-20 (1936); cf. *C. A.* 30, 3402^a.— The mechanism of thermal isomerization of hydrocarbons at normal and high pressures was studied. C_6H_{14} with and without SiO_2 or MoO_3 as catalysts, in a sealed tube was heated in an Fe chamber charged with benzene, b. 65-70°, at 370-420° for 1-200 hrs. C_8H_{18} and $C_{10}H_{22}$ were circulated through a Cu coil at 600° for 25 sec. Octane was heated in a Fe tube, with and without Ag lining (no catalysts), at 325-600° and 74-201 atm. for 2-7.5 hrs. The interpretation of the thermal isomerization of hydrocarbons as chiefly the result of secondary reactions of the products of the cracking process and not as that of direct rearrangement of the hydrocarbon skeleton is in agreement with the theoretical views of Nemtzev (*C. A.* 28, 3567^a), and is based on the following preliminary exper. evidence.

The reaction at atm. pressure even at temps. above 600° produced practically no isomerization or change of the hydrocarbons. Factors increasing the degree of cracking of hydrocarbons, such as time, temp., catalytic action of Fe chamber walls, etc., produced also a greater isomerization effect. This view is supported by the presence in the reaction products of fractions of satd. hydrocarbons with considerable amts. of isomeric compds. boiling lower and higher than the original octane. Chas. Blanc

A.S.T.M. METALLURGICAL LITERATURE CLASSIFICATION

METALLOGICAL

117 AND 216 CROSS
PROCESSES AND PROPERTIES INDEX
340 AND 416 CROSS

BC A-3

Catalytic cyclization of aliphatic compounds.
I. Cyclization of aliphatic hydrocarbons in presence of chromic oxide. B. L. MOUDATREI, G. D. KAMUCHEN, and M. V. KOHNEKHAJA (J. Gen. Chem. Russ., 1947, 7, 169-178).—The following aromatic hydrocarbons were obtained by passing paraffins over Cr_2O_3 at 480° : o-xylene, m-xylene, p-xylene, and PhMs, 10%; from n-octane: PhMs, from n-heptane: C₁₀H₈, from n-hexane: p-xylene, from Be^2+ ; m-C₁₀H₈, n-Pr², from (C₂H₅)₂Sn; from $\Delta^6 + \Delta^7$ -octene, and C₁₀H₈, from PhBu.
 R. T.

COMMON ELEMENTS
MATERIALS INDEX
FROM SYNGAS
FROM SOLID
FROM SOLID

ASM-ISA METALLURGICAL LITERATURE CLASSIFICATION

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PROCESSED AND REPRODUCED HERE

70

Ca

Catalytic cyclization of aliphatic hydrocarbons. II. Cyclization and dehydrogenation of hydrocarbons over oxides and sulfide catalysts. B. L. Moldavskii, H. D. Kamusher and M. V. Kobyl'skaya. *J. Gen. Chem. (U. S. R.)* 7, 1836-9(1937); cf. *C. A.* 31, 4932.—ZnO, TiO₂, MoO₃ and MoS₂ catalyze the cyclization of octane to *o*-xylene and the dehydrogenation of cyclohexane at 400-600°. The cyclization of aliphatic hydrocarbons containing, at least 6 C atoms is catalyzed by the same substances which promote dehydrogenation. III. Cyclization and dehydrogenation over different types of carbon. B. L. Moldavskii, F. Benporovskaya, H. D. Kamusher and M. V. Kobyl'skaya. *Ibid.* 1940-7.—Activated wood C and C from the pyrolysis of hydrocarbons deposited on Fe turnings dehydrogenate cyclohexane and cyclize octane to *o*-xylene and bisobutyl to *p*-xylene. In the last 2 reactions there is also splitting to give chiefly satd. gaseous hydrocarbons and a small amt. of unstd. gas. H. M. Leicester

ASTM-FLA. ORYTHOLOGICAL LITERATURE CLASSIFICATION

SEARCHED	INDEXED	FILED	CLASSIFIED

111 AND 112 GROUPS PROCESSES AND PROPERTIES INDEX 113 AND 114 GROUPS

CA 12

Isomerization of hydrocarbons. IV. Isomerization of butanes and their equilibrium relationships. B. L. Molodtsov and T. V. Nizovkina. J. Gen. Chem. (U. S. S. R.) 9, 1652 (1938); cf. C. A. 30, 6553f. —Isomerization equil. of butane + isobutane were studied in the presence of AlCl₃ at 70-180°. At low temps. (70-110°) no by-products were formed. Above 110° cracking took place. The following relation was arrived at experimentally: $\log K_p = 611/T - 1.206$. This equation is at variance with several theoretically calcd. formulas. D. Aclouy

A13-514 METALLURGICAL LITERATURE CLASSIFICATION

LITERATURE CLASSIFICATION

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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CA

Study of the isomerization of butanes and their equilibrium ratios. B. L. Molodtsov and Y. V. Nisovkina. *Comp. rend. acad. sci. U. S. S. R.* 23, 919-20(1939)(in English).--The catalytic isomerization of butane to iso-butane and vice versa by $AlCl_3$ was studied and the equilibrium ratio of the mixt. butane-isobutane was detd. in the temp. range 70 to 180°. The expts. were made at 70° in the liquid phase (by shaking the butanes with $AlCl_3 + CuSO_4 \cdot 2HCl$ in a sealed ampoule in a water thermostat) and at 110-180° in the vapor phase (by passing the butane vapors together with HCl over $AlCl_3$). The amts. of iso-butane in the equil. mixts. were found at 70°, 110°, 130°, 150° and 180° to be 79%, 73%, 67%, 63% and 48%, resp., for the results obtained at 70° (liquid phase) being calcd. for the vapor phase according to Raoult's law. The relation between the equil. const. K_p and the temp. is expressed by the equation: $\log K_p = 611/T - 1.204$. The data of previous investigators on butane isomerization are discussed. Dora Stern

458.514 METALLURGICAL LITERATURE CLASSIFICATION

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