

BULGARIA / Chemical Technology, Chemical Products and Their
Application. Fermentation Industry.

H-27

Abs Jour : Ref Zhur - Khimiya, No 5, 1959, No. 17241

Author : Tonchev, T.; Manchev, S.

Inst : Not given

Title : New Types of Wine Yeast

Orig Pub : Lozarstvo i vinarstvo, 1958, 7, No 4, 33-38

Abstract : From the local yeasts produced in Varna and Levskigrad,
new cultures of wine yeast were obtained: Varna - 52,
Varna - 38, and Muscat - 35. The laboratory and pilot
plant investigations of these new yeast cultures present
reasons to recommend them for the full size commercial
testing in the indicated rayons. -- G. Valuyko

Card 1/1

MANCHEV, Stamat Khristov

Wine stabilization by metatartaric acid. Sbor potrav VSChT
Vol. 5 pt.2:25-36 '61 [publ. '62].

1. Kafedra vinodeliya, Vysshiiy institut pishchevoy promyshlennosti,
Plowdiw, Bolgariya.

Mancheva, N.
MANCHEVA, N., dots.; MARKOVA, G.

Combined therapy of habit scoliosis with physical methods associated with ultraviolet rays. Suvrem.med., Sofia 6 no.2:64-70 1955.

(SCOLIOSIS, therapy,

phys.ther.with ultraviolet rays)

(ULTRAVIOLET RAYS, therapeutic use,

scoliosis, with phys.ther.)

(PHYSICAL THERAPY, in various diseases,

scoliosis, with ultraviolet rays)

DAKHOV, V.N., doktor geol.-miner. nauk; KHOLIN, A.I., kand. geol.-
miner.nauk; PESTRIKOV, A.S.; GALUZO, Yu.V.; AFRIKYAN, AN.;
YUDKEVICH, R.V.; POPOV, V.K.; POZIN, L.Z.; LARIONOV, V.V.;
VENDEL'SHTEYN, B.Yu.; GORBUNOVA, V.I.; DZYURAK, M.D.; YEVDOKIMOVA,
V.A.; ZHOKHOVA, R.G.; LATYSHEVA, M.G.; MAREN'KO, N.N.; MANCHEVA,
N.V.; MOROZOVICH, Ya.R.; OREKHOVSKAYA, Ye.P.; POKLONOV, M.S.;
ROMANOVA, T.F.; SEVOST'YANOV, M.M.; TANASEVICH, N.I.; FARMANOVA,
N.V.; FEDOROVICH, G.P.; SHCHERBININ, V.A.; ELLANSKIY, M.M.;
YANUSH, Ye.F.; YUNGANS, S.M., ved. red.; YAKOVLEVA, Z.I., tekhn.
red.

[Using methods of field geophysics in studying gas-bearing re-
servoirs]Primenenie metodov promyslovoi geofiziki pri izuchenii ga-
zonosnykh kollektorov. Moskva, Gostoptekhizdat, 1962. 279 p.
(MIRA 16:2)

(Gas, Natural--Geology)
(Prospecting--Geophysical methods)

VENDEL'SHTEYN, B.Yu.; BUKANOVA, M.G.; GORBENKO, A.S.; ISHMETOV, M.G.;
SKIBITSKAYA, N.A.; MANCHEVA, N.V.; SHVARTSMAN, M.D.; DAKHNOV,
V.N., doktor geol.-miner. nauk, prof., red.; KUZ'MINA, N.N.,
ved. red.; POLOSINA, A.S., tekhn. red.

[Album of nomograms and charts for interpreting the data of
geophysical methods for studying wells] Al'bom nomogramm i
paletok dlia interpretatsii dannykh geofizicheskikh metodov
issledovaniia skvazhin. Pod red. V.N.Dakhnova. Moskva, Gos-
toptekhizdat, 1963. 61 p. (MIRA 16:11)
(Prospecting--Geophysical methods)

MANCHEVA, R.; GANCHEV, Sv.

A case of generalized cytomegaly in a newborn infant.
Akush.Ginek.3 no.3:82-84 '64.

MANCHEVA, R.; NINOVA, P.

A newborn infant with congenital atrioventricular block.
Akush. ginek. (Sofia) no.2:1964-1965: 165.

1. Purvi gradski rodilen dom, Sofia (gl. lekar: Br. Papazov);
VMI, Sofia, Katedra po detski bolesti (rukov.: prof. L. Karnev).
Submitted December 1964.

(3)

Geriatrics

BULGARIA

MATEEV, Dr., VULNAROV, L., BOYADZHIEV, E., MANCHEVA, T. and KHUSTEVA, T.,
Center of Gerontology and Geriatry, MNZSG

"Changes in the Anthropometric and Hemodynamic Indices of Aged and Old
People Under the Effect of Functional Loading with Physical Exercises"

Sofia, Eksperimentalna Meditsina i Morfologiya, Vol 5, No 2, pp 114-118

Abstract: The anthropometric, physiological, and hemodynamic indices of persons with an average age of 75 yrs who exercised and participated in sports were compared with those of a control group of people of the same age who did not exercise systematically. The people who exercised systematically were divided into two subgroups, those who exercised regularly and those who did not exercise regularly, while the people in the control group were divided into a subgroup of active people and another of passive people. The comparison showed that beneficial changes took place in the group that exercised and that these changes were more pronounced for the subgroup that exercised regularly. Tables, 15 references (4 Bulgarian, 8 USSR, 3 Western). Manuscript received Jun 65. Russian and English summaries.

1/1

ZAYKOV, M.A.; TSELUYKOV, V.S.; KAMINSKIY, D.M.; DADOCHKIN, N.V.; LAR'INA,
P.G.; MESHCHERYAKOV, P.A.; Primali uchastiye: PERMYAKOV, V.M.;
MERKUTOV, V.N.; PROKOP'YEV, KAPITANOV, M.F.; MARAMYGIN, G.F.;
ZHURAVLEV, M.A.; MARININ, P.G.; NASIRUDIN, A.S.; MANCHEVSKIY, I.V.;
FELYAVSKIY, M.A.; SERGEYEV, V.V.; CHEVANOV, L.K.; KOBYLEV, V.K.;
KUCMKO, I.I.; MIRENSKIY, M.L.

Pressure of the metal on rolls in rolling carbon and alloyed steels
on a three-high billet mill. Izv. vys. ucheb. zav.: chern. met. 4
no.8:78-83 '61. (MIRA 14:9)

1. Sibirskiy metallurgicheskiy institut.
(Rolling mills)

PLEKHANOV, P.S., inzh.; KOSHKIN, V.A., inzh.; KRITININ, I.A., inzh.;
Prinimali uchastiye: BAZHENOV, M.M.; VAYNSHTEYN, I.L.; POPOV, R.Q.;
ZAKHARENKO, N.I.; MANCHEVSKIY, I.V.; GRDINA, Yu.V.; GOVORKOV, A.P.;
NESTEROV, N.A.; GRIGORKIN, V.I.

Rolling of high-manganese rails. Stal' 21 no.5:423-425 My '61.
(MIRA 14:5)

1. Kuznetskiy metallurgicheskiy kombinat (for Plekhanov, Koshkin, Kritenin, Bazhenov, Vaynshteyn, Popov, Zakharenko, Manchevskiy).
2. Sibirskiy metallurgicheskiy institut (for Grdina, Govorkov, Nesterov, Grigorkin).

(Railroads—Rails)

(Rolling (Metalwork))

ZAYKOV, M.A.; TSELUYKOV, V.S.; KAMINSKIY, D.M.; DADOCHKIN, N.V.;
MESHCHERYAKOV, P.A.; MARININ, P.G.; MIRENSKIY, M.L.; PROKOP'YEV,
A.V.; OVCHINNIKOVA, R.F.; Primali uchastiye; BELYAVSKIY, M.A.;
KAFTANOV, M.P.; KUCHKO, I.I.; LAR'KINA, F.Ye.; MANCHEVSKIY, I.V.;
MARAMYGIN, G.F.; MERKUTOV, V.N.; NASIBULIN, A.S.; NEFEDOV, M.K.;
PERMYAKOV, V.M.; CHELYSHEV, N.A.; CHVANOV, L.K.

Investigating conditions of rolling on three-high billet mills.
Izvy vys. ucheb. zav.; chern. met. 6 no.10:74-83 '63.

(MIRA 16:12)

1. Sibirskiy metallurgicheskiy institut i Kuznetskiy metallurgicheskiy
kombinat.

~~MANCHIN, Simeon~~ SHATS, Adol'f Yevlevich; KOCHENOV, M.I.,
kandidat tekhnicheskikh nauk, retsenzent; BEYZEL'MAN, R.D.,
inzhener, redaktor; BOGOMOLOVA, M.P., izdatel'skiy redaktor;
ZUDAKIN, I.M., tekhnicheskij redaktor

[Measuring instruments and techniques of measurements] Izmeritel'nyi
instrument i tekhnika izmerenii. Moskva, Gos.izd-vo obor. promyshl.,
1957. 198 p. (MLRA 10:10)
(Measuring instruments) (Machine-shop practice)

MANCHINOVA, Z. N.

USSR/Chemistry-Organic Mercury

Mar 52

"Photoreactions of Organic Mercury Compounds in Solutions. X. Reactions of Dimethyl Mercury
G. A. Razuwayev, Yu. A. Ol'dekop, Z. N. Manchinova, Gor'kiy State U

"Zhur Obshch Khim" Vol XXII, No 3, pp 480-483

Dimethyl mercury (I), in photolysis, splits into the radicals $\text{CH}_3\cdot$ and $\text{CH}_3\text{Hg}\cdot$; the reaction proceeds as in the case of aryl mercury compds. When exposed to ultraviolet rays, I reacts with CH_3OH to form $\text{CH}_3\cdot$, $\text{Hg}\cdot$, and CHCHO . In photoreaction with CHCl_3 , it yields methylmercurichloride, CH_3HgCl , and hexachloroethane. In soln of CH_3I when exposed to light, it forms methylmercuriodide and $\text{CH}_3\cdot$. In CCl_4 , upon exposure to light, it reacts to form methylmercurichloride, CH_3HgCl , and hexachloroethane. During photoreaction in soln of CH_3OH and CCl_4 , it forms the radicals $\text{CH}_3\text{Hg}\cdot$ and $\text{CH}_3\cdot$ which react with various components of the soln. The former yields methylmercurichloride in reaction with CCl_4 , the latter forms CH_4 in reaction with the CH_3OH .

PA 209T45

S/028/60/000/06/06/028
B012/B005

AUTHORS: Nekrasov, B. M., Manchinskiy, L. U., Libo, S. O.

TITLE: Standardization of Electrodes for Contact Spot-welding Apparatus

PERIODICAL: Standartizatsiya, 1960, No. 6, pp. 19 - 23

TEXT: At present, every enterprise is producing electrodes according to its own drawings. In order to centralize production, the Vsesoyuznyy nauchno-issledovatel'skiy institut elektrosvarochnogo oborudovaniya (All-Union Scientific Research Institute of Electric Welding Apparatus, abbreviated: VNIIESO) selected an efficient design, and published the tentative standard "Straight Electrodes for Electric Contact Spot-welding Apparatus. Construction and Exact Dimensions". Six types of forms (Fig. 1) are intended for the working part. Table p.20 gives a classification of electrode types with respect to their fields of application. Fig. 2 shows the change in the total number of spots in dependence on the length of the active part of electrodes. The service life of the electrode increases with the reduction of the working part. Figs. 3 and 4

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Standardization of Electrodes for Contact Spot- S/028/60/000/06/06/028
welding Apparatus B012/B005

show the dependence of the service life and cost of the electrode on its length. On the basis of investigations carried out by the VNIIESO and data of domestic enterprises and organizations as well as the Mezhdunarodnaya organizatsiya po standartizatsii (International Organization of Standardization), the following values were specified in the tentative standard: for electrodes of the types 1,2,6: D 12, 16 mm-h = 12 mm; D 20, 25 mm-h = 18, 20 mm; D 32, 40 mm-h = 22 mm; for electrodes of the types 3,4,5: D 12, 16 mm-h = 15 mm; D 20, 25 mm-h = 20 mm (D = outer diameter of electrodes, h = working part of the electrodes). It was found that the reinforcement necessary for taking the electrode out of its holder depends on the conical shape. Fig. 5 shows the results of a comparative examination of electrodes made of various materials. On the basis of investigations, the tentative standard provides the following materials: Chromium bronze of the type Бр.Х 0.7 (Br.Kh 0.7) for welding low-carbon, alloyed stainless, and refractory steel types; cadmium copper of the type МК (MK) for welding light alloys, low-carbon, and low-alloy steel types; chromium cadmium alloy of the type Мс-56 (Mts-56) for welding light alloys, carbon, and alloyed steel types; nickel silicon magnesium alloy of the type Мс-2 (Mts-2) for welding

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Standardization of Electrodes for Contact Spot- S/028/60/000/06/06/028
welding Apparatus BC12/5005

stainless, refractory steel types. If the types mentioned are not available, copper of the type M-1 (M-1) may be used. At the same time, the VNIIESO worked out a project of technical conditions for electrode materials with higher requirements. These requirements also refer to the tolerances of chemical composition. The standards of machine construction facilitate a centralized production of alloys and electrodes. This will raise the quality of contact welding, and save nonferrous metals. The "Elektrik" and "Krasnyy vyborzhets" Works are also mentioned. There are 5 figures and 1 table.

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USSR/Chemistry - Carbonates

Aug 52

"Variation in the Temperature of Carbonates Being Heated in a Flow of Gases," A. P. Lyuban, V. G. Manchinsky

"Zhur Prik Khim" Vol 25, No 8, pp 808-817

States that in a flow of gases, the slope of heating curves and the temp at plateaus on heating curves (stops) shifts toward lower temps. The so-called chem boiling of carbonates (analogous to boiling of a liquid) takes place not at a specific temp, but throughout the whole range of

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temps. The decomn of limestone is an exception. An increase in the rate of gas flow lowers the chem bp. The extent of the shift of the stops on heating curves corresponding to a given amt of supplied heat advances at such a flow rate. At this gas velocity, particularly in the presence of fine carbonate granules, the article notes, the process of carbonate decomn is affected in that the velocity of the process is limited by the velocity of the chem reaction. For limestone the lowest temp of the stop on the heating curve was 750-760°.

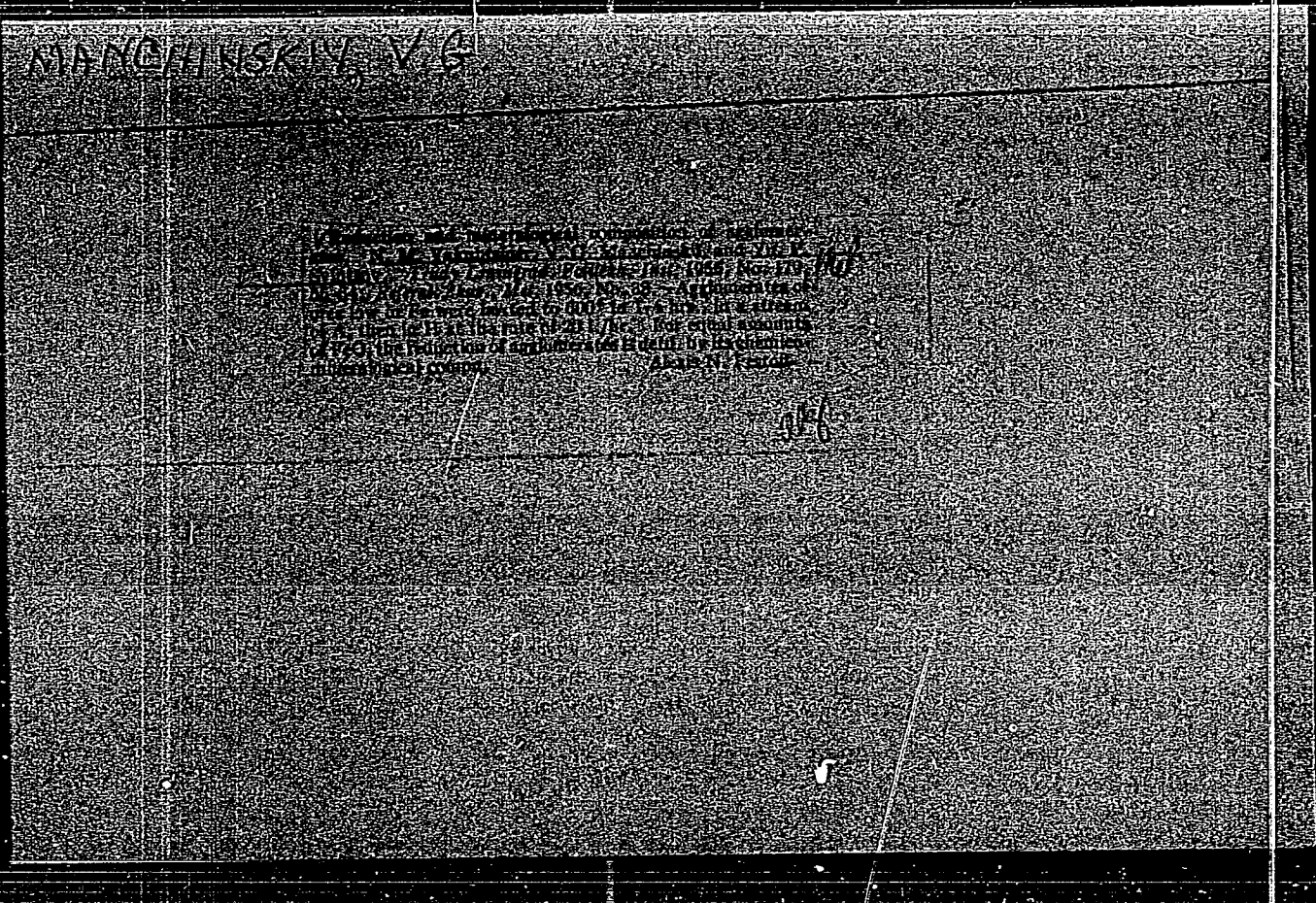
228T5

MANCHINSKY, V. G.

SHIL'T, B.A.; LYUBAN, A.P.; MANCHINSKIY, V.G.

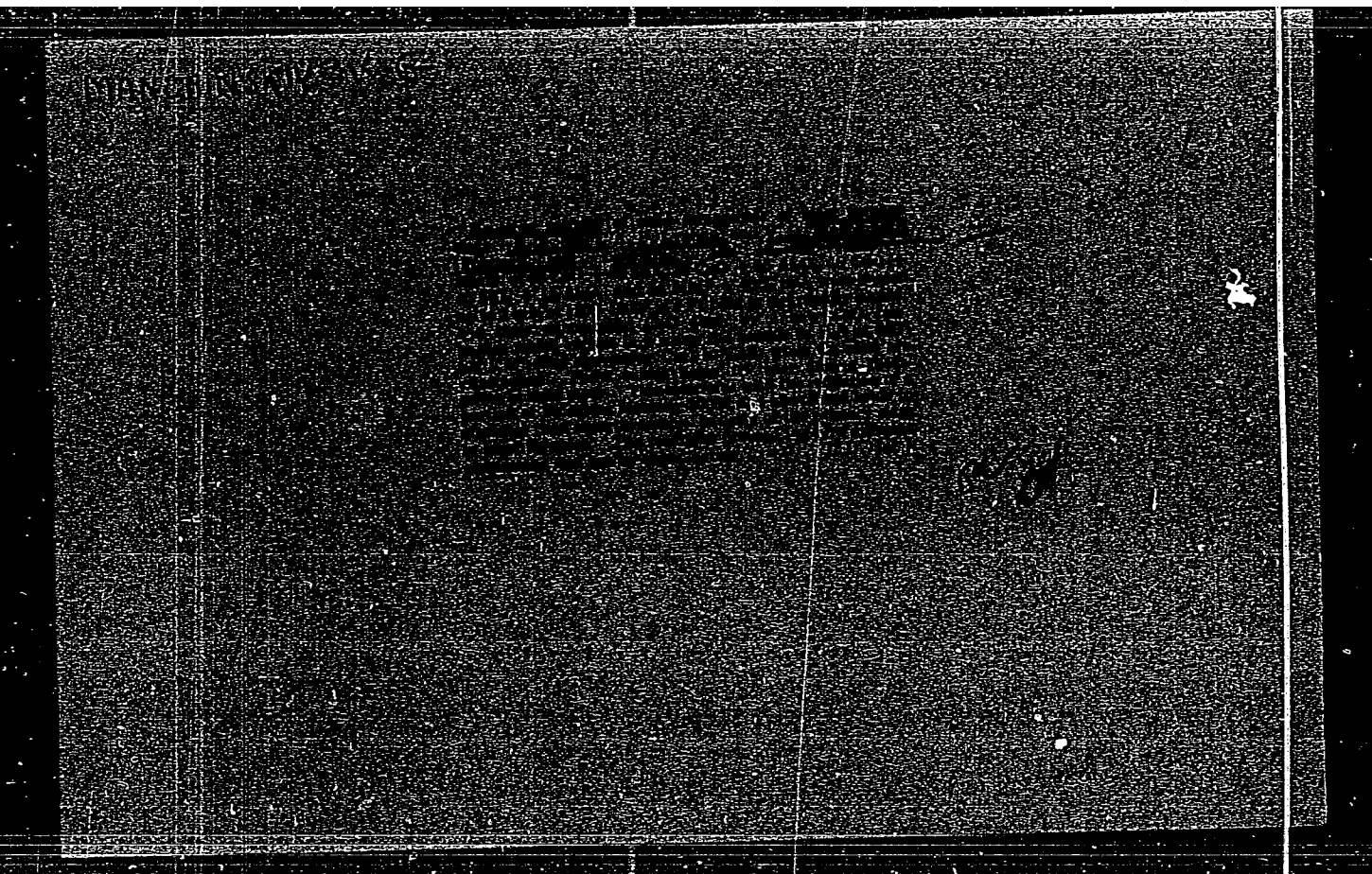
Rate of interaction among the hard components of blast furnace
slags. Stal' 16 no.4:303-307 Ap '55. (MIRA 9:7)

1.Leningradskiy politekhnicheskoy institut.
(Blast furnaces) (Slag)



"APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R001032110014-8



APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R001032110014-8"

SOV/137-59-1-292

Translation from Referativnyy zhurnal Metallurgiya, 1959, Nr 1, p 37 (USSR)

AUTHORS Manchinskiy, V G Antonov, V M

TITLE Reduction of Iron Ore by Means of Hydrogen and Carbon Monoxide at Elevated Pressures (Vosstanovleniye zheleznoy rudy vodorodom i okisyu ugleroda pri vysokikh davleniyakh)

PERIODICAL V sb Domennoye proizvo Moscow, Metallurgizdat, 1957
pp 3-19

ABSTRACT. The process of the reduction of Krivoy Rog ore (containing 67.8% Fe and 1.16% SiO₂) by the action of H₂ and CO was studied at temperatures ranging from 350 to 700°C and at pressures varying from 0 to 25 atm gage; the ore investigated was in a powdered form in grains ranging from 0.75 to 1.0 mm in size and in the form of cubes 12-13 mm per side. It was established that the greatest acceleration of the reduction process (RP) occurs during hydrogen reduction, with the ore in the form of grains ranging from 0.75 to 1.0 mm in size and with the pressure increased to 5 atm gage. At 350-400° and at pressures in excess of 5 atm gage hydrogen reduction of the ore, as well as the reduction of samples of it in the form of cubes 12-13 mm

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SOV/137-59-1-292

Reduction of Iron Ore by Means of Hydrogen and Carbon Monoxide (cont.)

per side is less effective since the rate of the RP is slowed down. It was discovered that in the course of the RP of grains of the Fe ore an increase in pressure will accelerate the decomposition of the CO until the high CO₂ concentration in the reaction zone will halt the decomposition process entirely. Increasing the pressure above 15 atm gage does not affect the quantity of the decomposed CO. The greatest rate of CO decomposition is observed at a temperature of 500°. It was established that the effect of the gas pressure on the rate of reduction of the ore by the CO is governed by the reciprocal influence of the process of CO decomposition and the RP of the Fe in the ore, the rates of these processes being affected to a different degree by an increase in gas pressure.

L. Kh

Card 2/2

Маньшинский, В. Г.

137-1958-3-4733

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 3, p 38 (USSR)

AUTHORS: Lyuban, A. P., Manchinskiy, V. G.

TITLE: Productivity of Blast Furnaces and the Consumption of Coke
(Proizvoditel'nost' domennykh pechey i raskhod koksa)

PERIODICAL: V sb.: Issled. domennogo protsessa. Moscow, AN SSSR,
1957, pp 98-110

ABSTRACT: Several years of service of two blast furnaces of an eastern plant were analyzed in a furnace of a southern plant in terms of average monthly data. The increase in productivity of the furnaces is computed separately, as a function of a decrease in the specific consumption of coke (at a constant index of smelting intensity) and of an increase in the intensity of smelting. It is noted that an optimal degree of smelting intensity exists (with respect to the specific consumption of coke), above which the specific coke consumption increases, while the productivity of the furnace at first increases only slightly and subsequently begins to decrease. Reasons for the drop in production figures of blast furnaces when the abovementioned limit is exceeded are analyzed in detail.

Ye. V.

Card 1/1

AUTHORS: Manchinskij, V. G., Kiselev, A. Ya. SOV/163-58 2-1/46

TITLE: The Effect of the Pressure and the Composition of the Gaseous Phase on the Rate of the Reduction of Iron and on the De composition of Carbon Monoxide (Vliyaniye davleniya i sostava gazovoy fazy na skorost' vosstanovleniya zheleza i raspad okisi ugleroda)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Metallurgiya, 1958, Nr 2, pp. 5-11 (USSR)

ABSTRACT: In the present paper the effect of the pressure on the course of the process of the reduction with gaseous mixtures containing neutral gas besides carbon monoxide and hydrogen was investigated. The experiments were carried out at the temperature of the maximum decomposition of carbon monoxide (500°C). The reduction of the gaseous mixtures takes place more slowly at any pressure than is the case with pure carbon monoxide. The increase in pressure increases the reaction of the decomposition of carbon monoxide as compared to the reactions at normal pressure. At any pressure (0-25 atmospheres excess pressure) the reduction rate of iron ore is decreased when the reduction

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SOV/163-58 2-1/46

The Effect of the Pressure and the Composition of the Gaseous Phase on the Rate of the Reduction of Iron and on the Decomposition of Carbon Monoxide

components in the gas mixtures become poor. The effect of the pressure of the gaseous mixture and the temperature on the decomposition of carbon monoxide and the degree of the reduction of iron were graphically represented. When the ratio $CO : CO_2$ in the gaseous mixture is increased the reduction rate as well as the decomposition rate of CO increase at a pressure of 0-25 atmospheres excess pressure. The increase of the CO_2 content in the gas mixture from 2,2% to 12,7% decreases the decomposition of carbon monoxide. When the ratio $CO : CO_2$ in the gaseous mixture is increased the effective influence on the decomposition of carbon monoxide increases. When the pressure is increased with a simultaneous concentration of oxygen in the mixture the decomposition rate of carbon monoxide is very high. There are 4 figures, 3 tables, and 3 references, 1 of which is Soviet.

ASSOCIATION: Leningradskiy politekhnicheskiy institut (Leningrad Polytechnical Institute)
Card 2/3

GHUZINOV, Vladimir Konstantinovich; MANCHINSKIY, V.G., dotsent, kand.
tekhn.nauk, retsenzent; SHAROV, S.I., prof., doktor tekhn.nauk,
red.; SYRCHINA, M.M., red.izd-va; MATLYUK, R.M., tekhn.red.

[Controlling the flow of gases in blast furnaces by means of
programmed burdening] Upravlenie gazovym potokom v domennoi
pechi programnoi zagruzkoj. Sverdlovsk, Gos.nauchno-tekhn.
izd-vo lit-ry po chernoi i tsvetnoi metallurgii, Sverdlovskoe
otd-nie, 1960. 214 p. (MIRA 13:10)
(Blast furnaces) (Gas flow)

STEFANOVICH, Mikhail Aleksandrovich; MANCHINSKIY, V.G., dotsent, retsenzent;
TREKALO, S.K., red.; KRYZHOVA, M.L., red.izd-va; MATLYUK, R.M.,
tekh.red.

[Analysis of the blast furnace process] Analiz khoda domennogo
protssesa. Sverdlovsk, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi
i tsvetnoi metallurgii, Sverdlovskoe otd-nie, 1960. 286 p.

(MIRA 13:10)

(Blast furnaces)

S/137/62/000/002/006/144
A006/A101

AUTHORS Manchinskiy, V. G., Tribulkin, A. P.

TITLE. The comparative rate of carburizing liquid iron and its alloys with carbon and carbon monoxide

PERIODICAL Referativnyy zhurnal, Metallurgiya, no. 2, 1962, 16, abstract 2A77 ("Nauchno-tekh. inform. byul. Leningr. politekhn. in-t", 1960, no. 11, 79-84)

TEXT. Carburizing experiments were conducted in a Tamman furnace in CO atmosphere and alundum crucibles during carburizing with CO, and in graphite crucibles when solid C was the carburizing agent (crucible material), at 800 - 1,400°C. During carburizing with CO gas of alloys with 1.78, 1.92 and 3.9% C, there was no substantial carburization observed. Sometimes the C percentage even decreased. Experiments of carburizing powdery Fe with CO gas yielded an increase of the C percentage in Fe (with extended duration of the experiment and at higher temperature) up to 0.095% for 180 min at 800°C and up to 0.09% for 30 min at 1,200°C. Experiments of carburizing alloys with 0.79, 1.78 and 1.92% C with solid C at 1,200, 1,350 and 1,550°C showed intensified carburization of the

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The comparative rate of carburizing ...

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A006/A101

metal, developing very rapidly during melting, and attaining its highest rate within the initial 2 minutes following the melting. Subsequently the carburization rate decreased and after about 15 minutes a more or less stable C concentration in Fe was established depending only on temperature. Apparently, this value is close to an equilibrium C content in liquid Fe. Experiments of carburizing powder-like Fe with solid C showed also intensified development of the process. The experimental results lead to the conclusion that in a blast furnace the main carburizing agent is not CO, as it is usually assumed, but solid C. Highest carburizing rate occurs at temperatures approaching the melting point and during melting. Therefore in a blast furnace, most intensive carburization proceeds in the lower third section of the shaft at 1,000-1,150°C. Final carburization takes place in the furnace hearth. The final C content is rapidly established (within 30 - 60 min). Therefore variations in the C content in cast iron for each heat do not depend on the carburizing rate but on temperature fluctuations. On the basis of the data obtained the author would rather not agree with Siepshova's conclusions (RZhMet, 1958, no. 10, 20526 that easily reducible ores promoted cast iron carburization. The increase of the C content in cast iron melted on fluxed sinter, is explained by an increase of its temperature due to

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The comparative rate of carburizing ...

S/137/62/000/002/006/144
A006/A101

the supply of more heated slag to the hearth. The authors present concepts on conditions promoting the production of low carbon cast iron in a blast furnace.

S. Rostovtsev

[Abstracter's note: Complete translation]

Card 3/3

MANCHINSKIY, V.G., kand.tekhn.nauk, dots.; ZAYTSEV, A.F., insh.

Investigating materials flowing in front of the tuyeres by means
of a volumetric hydraulic model. Stal' 20 no.9:774-779 8 '60.
(MIRA 13:9)

1. Leningradskiy politekhnicheskii institut.
(Blast furnaces) (Hydraulic models)

LYUBAN, A.P.; MANCHINSKIY, V.G.

Kinetics of certain heterogenous reactions in the blast furnace
process. Trudy LPI no.212:40-51 '60. (MIRA 13:12)
(Blast furnaces) (Chemical reaction, Rate of)

ANIKEYEV, V.A.; LYUBAN, A.P.; MANCHINSKIY, V.G.

Dissociation and reduction of higher manganese oxides. Trudy LPI
no.212:52-59 '60. (MIRA 13:12)
(Manganese oxide) (Chemistry, Metallurgic)

MANCHINSKIY, V.G.; OSTASHEV, Yu.I.; KISELEV, A.Ya.

Iron reduction and the decomposition of carbon monoxide at high
pressures. Trudy LPI no.212:60-80 '60. (MIRA 13:12)
(Iron--Metallurgy) (Carbon monoxide)

MANCHINSKIY, V.G.

Effect of gas pressure on the loss of head in the bed of blast
furnace burden materials. Trudy LPI no.212:92-107 '60.
(MIRA 13:12)

(Blast furnaces)

(Pressure)

MANCHINSKIY, V.G.

Investigating on a hydraulic model the movement of materials and
gases in front of blast furnace tuyeres. Trudy LPI no.212:108-119
'60. (MIRA 13:12)

(Blast furnaces—Models)

(Hydraulic models)

MANCHINSKIY, V.G.

Some characteristics of the reduction of the stationary iron ore
layer by gases. Izv.vys.ucheb.zav.; Chern.Met. 4 no.6:11-19 '61.
(MIRA 14:6)

1. Leningradskiy politekhnicheskii institut.
(Iron—Metallurgy)

OSTROUKHOV, Mark Yakovlevich. Primala uchastiye ZHILO, N.L.,
kand. tekhn. nauk; MANCHINSKIY, V.G., kand. tekhn. nauk,
doks., retsenzent; SHAROPIN, V.D., red.

[Slag formation process in the blast furnace] Protsess
shlakobrazovaniia v domennoi pechi. Moskva, Metallurg-
izdat, 1963. 222 p. (MIRA 18:8)

MANCHINSKIY, V.G.

Characteristics of iron reduction by gases in conditions of
counterflow. Trudy LPI no.225:11-32 '64. (MIRA 17:9)

GLIK, E.V.; POPOV, Kh.; MANCHINSKIY, V.G.

Viscosity of melts in the system $BaO - SiO_2 - Al_2O_3$. Trudy LPI
no.225:136-142 '64. (MIRA 17:9)

ACCESSION NR: AT4028326

S/2563/64/000/225/0143/0148

AUTHOR: Shedalenkov, G. I.; Manchinskiy, V. G.; Shkodin, K. K.; Andronov, V. N.

TITLE: The use of ultrasonic vibration for the intensification of sulfur removal from cast iron in a liquid state

SOURCE: Leningrad. Politekhnikheskiy institut. Trudy*, No. 225, 1964, Metallurgiya chugana (cast iron metallurgy), 143-148

TOPIC TAGS: ultrasonic methods, cast iron, sulfur content, desulfurization

ABSTRACT: The authors state that desulfurization of liquid cast iron can be accelerated by more intense vibration which can be imparted to the liquid metal with the aid of ultrasonic oscillation. The purpose of this paper is to explain the possibility of intensifying the desulfurization process of cast iron with the aid of ultrasonics. The authors illustrate and describe the arrangement of their equipment using an ultrasonic laboratory generator ULG-2 with a vibration resonance frequency of 22.1 kc. The results of the experiment at temperatures of 1200°C and 1350°C are presented in a table. The sulfur content in liquid cast iron during ultrasonic oscillations as well as in the absence of oscillations are presented in graphs. The authors constructed a formula in order to calculate the amount of executed

Card 1/2

ACCESSION NR: AT4028326

desulfurization.

$$r = \eta \frac{K}{\rho \cdot f}$$

where η is the viscosity of cast iron
 ρ is the particle density
 f is the oscillation frequency
 K is the constant coefficient, which equals 3.5

The authors conclude that desulfurization of cast iron is appreciably accelerated in molten cast iron with 2% Mn by use of ultrasonic oscillations with a frequency of 22.1 kc. Ultrasonic oscillations are most effective at the initial period when the sulfur content is high. As the sulfur concentration decreases, the effect attenuates. In order to decrease the sulfur content in liquid cast iron from 0.2 to 0.035-0.036%, the application of ultrasonic oscillations is sufficient for a period of 12 minutes at a temperature of 1200-1350°C. Orig. art. has: 2 figures, 1 table.

ASSOCIATION: Leningradskiy Politeknicheskii Institut imeni M. I. Kalinina
(Leningrad Polytechnical Institute)

SUBMITTED: 0000063

DATE ACQ: 16Apr64

ENCL: 00

SUB CODE: ML, FM

NO REF SOV: 007

OTHER: 000

Card 2/2

MANCHINSKIY, V.G.; TROSHENKOV, B.V.

Losses of gas pressure in a moving layer of materials. Trudy LPI
no.225:149-155 '64. (MIRA 17:9)

MANCHOROV, T.; SVETLIN, Iv.

News from the State Industrial Enterprise "Petur Chengelov" of
Plovdiv. Kozhi Sofia 3 no.4:13-14 '62.

L 52135-65 EWP(m)/EWP(L)/EWP(D)/EWP(e) Fq-4 WH

ACCESSION NR: AP5015860

UR/0286/65/000/009/0111/0111

665.29

20

AUTHOR: Alent'yev, A. A.; Gurovich, Ya. I.; Yemel'yanov, B. M.; Kovalev, P. S.;
Manchuk, K. I.

TITLE: Composition of a charge for glazing. Class 48, No. 170815

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 9, 1965, 111

TOPIC TAGS: glass coating, glazing, silicon

ABSTRACT: This Author's Certificate introduces: 1. A glazing compound based on silicon oxide. The physical and mechanical properties of the glazing are improved by using the following components (in percent): silicon oxide--61.0-64.0; titanium dioxide--5.0-10.0; potassium oxide--4.7; sodium oxide--9.3; lithium oxide--8.0; boron oxide--4.0; Fluorine above 100%--10.0. 2. A modification of this glazing compound which contains 3% iron sulfide. 3. A modification of this glazing compound which contains 5% aluminum oxide.

ASSOCIATION: none

SUBMITTED: 18 May 63

ENCL: 00

SUB CODE: NI

Card: 1/1 7/6

NO REF SQY: 000

OTHER: 000

MANCHUZHENKO, A.; IL'IN, M.; STRAZOV, K. (Kiyev); SHABUROV, Yu. (Kazan');
BLYAKHOV, L.; DOVZHENKO, N.; DUBININ, G.

Editor's mail. Sov. profsoiuzy 16 no.19:42-48 O '60. (MIRA 13:10)

1. Pervyi sekretar' Kamensk-Ural'skogo gorkoma Kommunisticheskoy Partii Sovetskogo Soyuza, Sverdlovskaya, oblast' (for Manchuzenko).
2. Instruktor Krasnodarskogo krayevogo soveta profsoyuzov (for Il'in);
3. Instruktor Stalinskogo oblsovprofa (for Dovzhenko). 4. Predsedatel' pravleniya kluba imeni Ger'kogo, zernosovkhoz "Gigant" (for Dubinin).
(Trade unions)

USSR/Human and Animal Physiology (Normal and Pathological).
Effect of Physical Factors. Ionizing Emissions.

T

Abs Jour: Ref Zhur-Biol., No 17, 1958, 80141.

Author : Becharevich, Aleksandar D.; Kacanski, Datica I.;
Mancic, Desanka D.

Inst :

Title : Investigation of the Inclusion of P³² in Phospholipids
and Nucleoproteids of the Liver in Rats and of the
General Increase of Weight of the Liver After γ -Ex-
posure of the Whole Body.

Orig Pub: Glasnik biol. sek. Hrvatske prirodosl. dristvo, 1953,
(1950) Ser. 2B, 7, 101.

Abstract: No abstract.

Card : 1/1

125

ANNOUNCED

RUSSIAN

ON THE PRODUCED CHANGES IN THE LIVER OF RATS
IRRADIATED WITH GAMMA RAYS. INCREASE OF LIVER
WEIGHT AND THE AUGMENTATION OF INCORPORATED
P³² IN THE PHOSPHOLIPIDS AND NUCLEOPROTEINS

Alkhanov, D., Bekasov, P., Kabanov, I., and Desnitskaya,
D. Radiat. Eff. in Nucl. Sci. Series A: Appl. Radiat. Isot.
1964, 12, 103-104. Russ. J. On English

Experiments are described in which white rats are ex-
posed to daily partial doses of 15 r or 2 r. Typical effects
observed included fall of body weight at first followed by a
mild increase. Increase of liver weight probably due to in-
creased metabolism of proteins in the liver, and a great in-
crease in fat metabolism. (M.P.D.)

Mandić

Effect of x-rays on the quantity and metabolism of deoxyribonucleic acid in the liver of rats, examined with phosphorus-32. Aleksandar D. Bećurević, Katica I. Kačanski, and Desanka D. Mandić (Inst. Nuclear Sci., Belgrade). *Bull. Inst. Nuclear Sci. "Boris Kidrič"*, 5: 123-6 (1956); cf. *C.A.* 49: 7020i. — The rats were irradiated with 050 r. and 24 hrs. after irradiation the incorporation of P^{32} into the deoxyribonucleic acid (DNA) decreased by 74%. Thus, after irradiation, the synthesis of DNA was greatly slowed down. N. E. Pickering

MANCIC, D

Country : Yugoslavia
Category : Diseases of Farm Animals. Diseases Caused
by Viruses and Rickettsiae. R-2
Abstr. Jour : RZBiol., No. 4, 1959, No. 16831
Author : Zivkovic, Slobodan; Surducki, Isa; Mancic,*
Institut. : -
Title : The Pneumonia Virus in the Swine.
Publ. : Poljopr. Vojvod., 1956, 6, No 1, 31-36
Abstract : No abstract.

Cand: 1/1
*Dragan.

13

Mancic, D.

4500
 EFFECTS OF IRRADIATION ON THE METABOLISM OF
 NUCLEIC ACIDS AND THEIR ACID SOLUBLE DERIVATIVES
 IN THE RAT. A. Bećarević, M. Micanović, D. Mancić, and
 Ljiljana Hadžić (Inst. of Nuclear Science "Boris Kidrič,"
 Belgrade). *Experientia* 12, 23-4 (1956) Jan. (in French)

In the rat, x irradiation leads to a decrease of the total RNA
 and DNA content of the spleen, without, however, increasing
 the low molecular weight nucleic acid derivatives in the
 acid-soluble fractions of the same tissue. It is suggested
 that an alteration of the cell membranes could account for
 the apparent elimination of these nucleic acid degradation
 products which should normally appear in the acid-soluble
 fraction. (auth)

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11/1

MANO DE ANKA D

THE INFLUENCE OF THE SULFATED CHRYMORIN
ON THE DEGRADATION OF CELLULOSE BY
CELLULOSE DEGRADING ENZYME - DERMATOLYSE
FROM *Trichoderma reesei* (ATCC 27121) (1971)
VOLUME 11, NUMBER 1, 1971

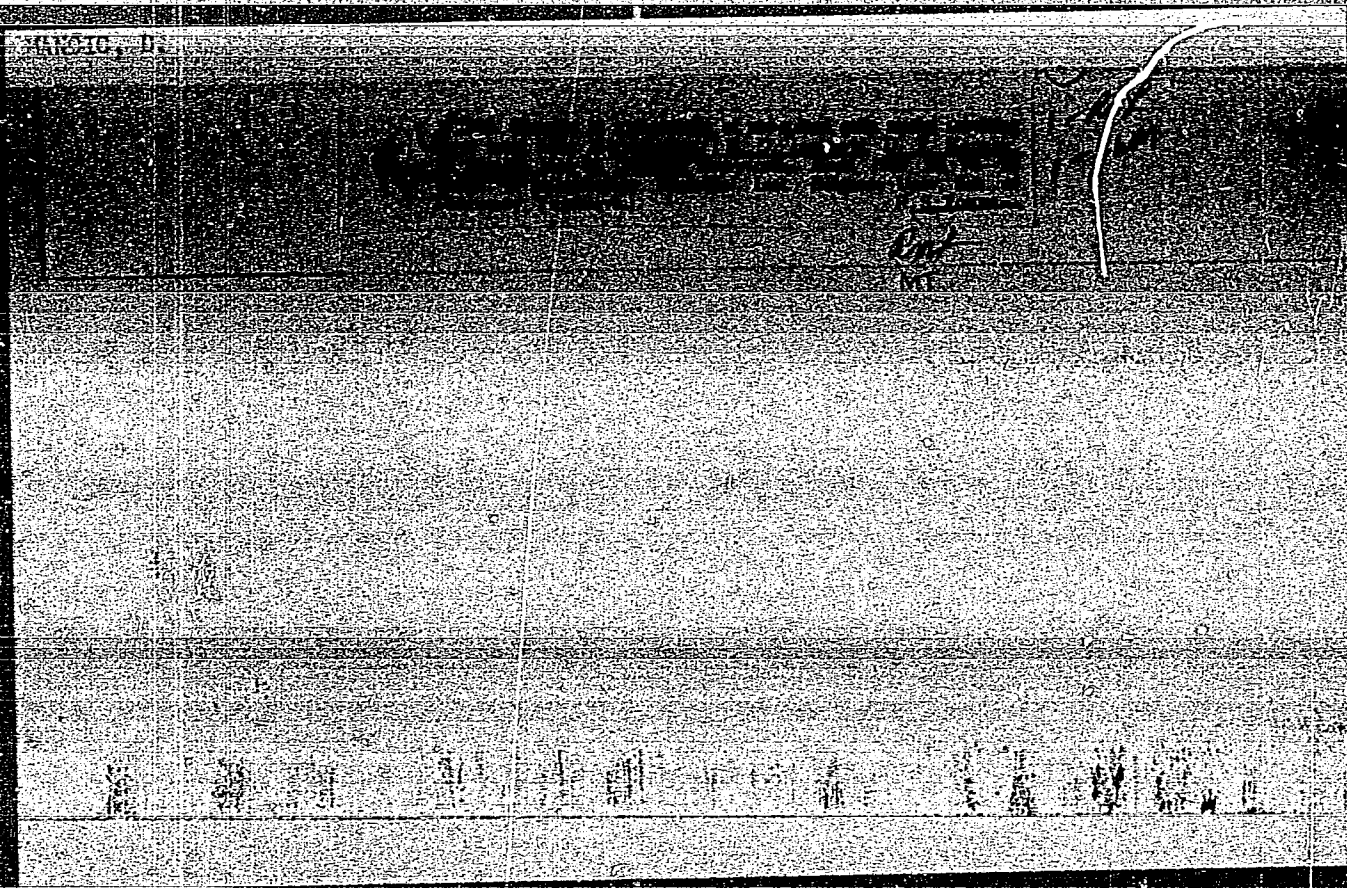
The activity of the enzyme (dermatolyse) in relation
to the substrate with sulphated and unsulphated
cellulose is described. It is shown that there is a connection
between the fall of carboxylic acid content and in-
creased activity of enzyme after X-irradiation. (only)

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MANCIC, K.

MANCIC, K. Application of electronics in automatic centrals. p. 29

Vol. 4, No. 2, Apr. 1955

TELEKOMUNIKACIJE

TECHNOLOGY

Beograd

SO: MONTHLY LIST OF EAST EUROPEAN ACCESSIONS, (EEAL), VOL 4, no. 9
Sept. 1955

Manero, M.

Early effects of x-rays on the metabolism of nucleic acids in the spleen and intestine of rats. A. D. H. Cooper, K. F. Kozlowski and M. Manero. *Int. J. Radiat. Biol.* 1977, 32, 123-128 (in French); *Int. J. Radiat. Biol.* 1977, 32, 129-134 (in French); *Int. J. Radiat. Biol.* 1977, 32, 135-140 (in French). Tissues were removed 36 min. after receiving 1500 r of x-rays. Deoxyribonucleic acid was identified 30% in the spleen and 18% in the spleen. Ribonucleic acid was lowered 18% in the intestine but was unchanged in the spleen. Acid data showed that the total purine and pyrimidine levels increased 80% in the intestine and 60% in the spleen, probably as nucleosides and nucleotides. W. C. Toth.

SEVCENKO, V.B. [Shevchenko, V.B.]; ZOLOTUCHA, S.I. [Zolotukha, S.I.];
KASCEJEV, N.F. [Kashcheyev, N.F.]; CAREV, S.A. [TSarev, S.A.];
MICHAJLOV, A.A. [Mikhaylov, V.A.]; TOROPCENOVA, G.A.
[Toropchenova, G.A.]; MANCIK, M. [translator]

Complex utilization of uranium ores. Jaderna energie 4 no.11:
338-341 N '58.

MANCINSKI, V.G. [Manchinsky, V.G.]

Iron ores in static state, and some peculiarities of their reduction
with gases. Analele metalurgie 16 no.1:11-20 Ja-Mr, '62.

MANCIU, MARIA

RUMANIA/Chemical Technology. Chemical Products and Their Application. Leather. H-35
Mechanical Gelatins. Tanning Agents. Technical Albumens.

Abs Jour : Ref. Zhur-Khimiya, No 11, 1958, 38452.

Author : Alexa Gh, Strub Const, Maga Cornelia, Iarosinschi-Drabic Irina, Manciu Maria.

Title : Fir bark (*Abies pectinata*) as a Tanning Material

Orig Pub : Studii si cercetari stiint Acad RPR Fil Iasi Chim, 1956, 7, No 1, 147-157.

Abstract : The content of tannin (T) in fir bark (*Abies pectinata*) stripped at a height of 2 m from the base comprises (in %): 4.62, 4.31, 5.34, 5.09, 5.82 and 5.31.

with the growth of the tree to 20, 35, 45, 50, 80 and 93 years respectively. The quality (Q) of the extract comprises 55.00, 53.67, 62.23, 60.30, 56.61 and 64.83 respectively.

The high Q indicates the value of fir bark as a tanning material that can be used for the improvement of the Q of extract from the bark of the fir (*Picea*). The quantity of extracted T increases with the duration of extraction (E), but this increase decreases with the growth of the tree. Sharp increases of temperature in the process of E decreases the output of T and Q. The addition of sulfite during E increases the output of T from the bark of 80-year-old firs by 8-15%, depending on the duration of E. The removal of resinous substances from bark before E does not improve the output of T with Q.

COUNTRY : Rumania H-35
CATEGORY :
ABS. JOUR. : RZKhlm., No. 16 1959, No. 59526
AUTHOR : Iarosinseni-Drabic, I., Maga, C., Manciu, M., and
INST. : Rumanian Academy of Sciences
TITLE : The Effect of Temperature on the Technical Prop-
erties of Vegetable Tanning Extracts
ORIG. PUB. : Studii si Cercetari Stiint Acad RPR Fil Iasi
Chim, 9, No 1, 137-148 (1958)
ABSTRACT : Vegetable tanning extracts are very sensitive
to the effect of various external factors, es-
pecially to temperature. Depending on the tem-
perature and time of drying, the grinding pro-
cess used and the degree of fineness of the
material, and the presence of resins, variations
were observed in the tannins and non-tannins
content and in the quality of pine and birch
bark extracts. Leaves of Rhus typhina and
Cotinus coccinifera were processed under the same

CARD: 1/2 Strub, C.

412

ALEXA, Gheorghe, dr. ing., Prof. Emerit; CHIRTA, Gheorghe, conf. ing.;
CHIRTA, Aglaia, lect. ing.; MANCIU, Maria, ing.; SCHIFTER, Hari, ing.;
MAHESCU, Valeriu, ing.

Stability in time of chemical and physical characteristics of
leather tanned by a combination tannage with chromium and form-
aldehyde. Industria usoara 10 no.1:3-6 Ja '63.

ALEXA, Gh.; CHIRITA, Gh.; CHIRITA, A.; MANCIU, M.; SCHIFTER, H.; NANESCU, V.

On the stability in time of physicochemical and chemical characteristics of leathers dressed by the combined formol and chromium method. Studia Univ B-B S Chem 8 no.1:509 '63

1. Iasi Polytechnic Institute.

MANCIU, T.

Rings to minimize Foucault currents with direct-current motors. p.23. (ELECTROTEHNICA, Bucuresti, Vol. 1, No. 1/2, Jan./Feb. 1953)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 6, June 1955, Uncl.

MANCIU, T.

Theory of the diagrams of thermal compensation for magnetoelectric instruments. p. 252.

METROLOGIA APLICATA. (Directia Generala de Metrologie de pe linga Consiliul de Ministri) Bucuresti, Rumania. Vol. 5, no. 6, Nov./Dec. 1958

Monthly list of East European Accessions (EEAI) LC Vol 8, No. 6, June 1959
Uncl.

MANCIULESCU, Anisoara
SURNAME, Given Names

Country: Ruman ia

Academic Degrees: -Engineer-

Affiliation: -not given-

Source: Bucharest, Revista de Chimie, Vol 12, No 8, Aug 1961, pp 478-489.

Data: "Theoretical and Technological Problems Connected with Urea
Production."

870 921643

MANGIULESCU, Anisoara

New trends in urea production. Rev chimie Min petro 15 no.12-
733-735 D '64.

BALACEANU, Mariana; MANCIULESCU, D.

On a case of subacute streptococcal thyroiditis cured with antibiotics.
Stud. cercet. endocr. 14 no.1:103-105 '63.

(THYROIDITIS) (STREPTOCOCCAL INFECTIONS) (PENICILLIN)
(TONSILLITIS) (PHARYNGITIS) (INFLUENZA)

MANCO. A.

A Characteristics of the HD-35 tractor. p. 18

Vol. 9, no. 9, Sept. 1955
PER BUJQESINE SOCIALISTE
Tirane, Albania

SO: East European Accession Vol. 5, no. 4, April 1956

MANCO, A.

MANCO, A. Technical guide for tractor operators. p.19.

Vol. 9, No. 12, Dec. 1955, PER BUJQESINE SOCIALISTE, Tirane, Albania.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 10,
Oct. 1956.

VAGNEROVA, Kamila; MANGURA, V.

Production and utilization of aminoacids by various species of rhizosphere bacteria. Folia microbiol. 7 no.1:55-60 '62.

1. Department of Soil Microbiology, Institute of Microbiology Czechoslovak Academy of Sciences, Prague 6.
(AMINO ACIDS metab) (BACTERIA metab)

MANCZAK, Henryk, dr inż. (Wrocław)

Determination of the proper amount of sewage and pollution
in order to calculate the dimensions of a purification plant.
Gosp wodna 23 no.12:458-464 D'63.

MANCZAK, Henryk, dr inz. (Wroclaw)

Problems of protecting the water of the Rhine River from pollution.
Gosp wodna 24 no. 4:140-143 Ap '64.

MANCZAK, Henryk, dr. inż. (Wrocław)

Certain aspects of the self-purifying process in designing
installations protecting from water pollution. Gosp wodna
24 no.12:453-457 D '64.

MANCZAK, K.; LEBSON, S.

Correction of the frequency errors of electromagnetic voltmeters. p. 58.

POMIARY, AUTOMATYKA, KONTROLA. Warszawa, Poland, Vol. 5, no. 2, Feb. 1959.

Monthly List of East European Accessions (EEAI), IC, Vol. 8, no. 8, Aug. 1959/

MANCZAK, Kazimierz; MILCZARSKI, Jędrzej

Instruments for measuring the characteristics of frequencies. Archiw
automat 5 no.2:245-272 '60. (EEAI 9:10)

1. Polska Akademia Nauk, Zaklad Automatyki.
(Measuring instruments)
(Frequency measurement)

16,4000 (1031, 1121, 1132)

25135

P/034/61/000/002/002/002

D237/D303

AUTHOR: Mańczak, Kazimierz, Master of Engineering

TITLE: Optimizing control systems - Part I

PERIODICAL: Pomiary, Automatyka, Kontrola, no. 2, 1961,
67 - 68

TEXT: Most processes have an optimum performance for certain values of parameters. There are generally 2 kinds of quality indices for processes. In some cases the index has no constant position in relation to disturbances, while in other cases the quality index has a fixed position on disturbance co-ordinates, although the index itself changes its value. The relation between disturbance and optimum value, in most cases, is very complex. There are few cases where it is relatively easy to find a relation between disturbances and optimum performance. As an example the control of the angle of blades in a water turbine is quoted. The system in block form is shown in Fig. 5. In most cases, however, the characteristics of the processes

X

Card 1/5

Optimizing control systems -Part I

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are not known. It is, therefore, necessary to employ special systems seeking an optimum performance for a given plant and process. There are 3 groups of automatic control. Open loop control, closed loop control and self adopting systems. The latter system seeks continuously for optimum. The system seeks for itself the desired values of such magnitude that the process, or plant is most efficient. The system tries to hold optimum for the entire plant. In a normal closed loop system the system tries to maintain the desired value. Hence the optimum is a kind of desired value for the entire process. It can depend on one parameter (controlled variable) or it can be multi-variable. There is a lack of proper classification for the optimising systems. Therefore it is very difficult to define terms. One way of classifying optimizing systems is according to the kind of control signal and the manner of seeking the optimum. There are 3 groups a) independent constant speed of search b) proportional speed of search c) variable speed of

Card 2/5

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P/034/61/000/002/002/002

Optimizing control systems - Part I D237/D303

search mixed a) reacts on change of sign only b) reacts on change of sign and magnitude of difference between actual and optimum performance c) reacts for small signals like (a) and for large signals like (b). The optimizing system in respect to controller input signal can be divided into 4 groups: 1) measuring derivative of the optimized value with respect to time; 2) measuring slope of static characteristic; 3) measuring first difference optimizing value (or its integral) with respect to time; 4) measuring difference between actual value and optimum. In 3 and 4 integrals are frequently used (re-set controllers) in order to eliminate noise signals. Another classification is with respect to the quality of signals i.e. continuous and step signals. The system can be defined by quoting the way the optimum is being searched for and the kind of signals at the input and the output to the controllers. The author finally gives a short review of research on optimizing systems. There are 6 figures and 13 references: 8 Soviet-bloc

Card 3/5

25135

Optimizing control systems - Part I

P/034/61/000/002/007/002
D237/D303

X

and 5 non-Soviet-bloc. The references to the English-language publications read as follows: R.L. Cosgriff, Servos that use can optimize. Control Engineering no. 9, 1955 133 - 135; H.S. Tsien, Engineering Cybernetics. McGraw-Hill, New York Optimising Control p.214 - 230; N.H. Young, An automatic control system with provision for scanning and memory. Transactions AIEE pt. I Sept. 1953 p. 392 - 395; C.S. Draper, Y.T. Li, Principles of optimilising control systems and applications to internal combustion engine. ASME Publications. New York 1951.

ASSOCIATION: Zakład automatyki PAN (Department for Automation PAS)

Card 4/5

MANCZAK, Kazimierz

Invariance principle in the control theory. Archiw automat 6 no.2/3:
195-202 '61. (EEAI 10:9)

1. Polska Akademia Nauk, Zaklad Automatyki.

(Automatic control)

MANCZAK, Kazimierz

Problems of peak-holding control systems. Archiw automat 6 no.2/3:
317-326 '61. (EEAI 10:9)

1. Polska Akademia Nauk, Zaklad Automatyki.

(Automatic control)

MANCZAK, Kazimierz; TUSZYNSKI, Kazimierz

External control and regulation. I. Their bases. Przem chem
40 no.12:669-671 D '61.

1. Zaklad Automatykcji, Instytut Chemii Ogolnej i Zaklad
Automatyki, Polska Akademia Nauk.

P/031/62/007/001/007/021
D265/D308

4 8000

AUTHOR: Mańczak, Kazimierz

TITLE: Conditions of appearance of simple and complex oscillations in the sampled on-off optimizing control systems

PERIODICAL: Archiwum automatyki i telemekhaniki, v. 7, no. 1-2, 1962, 71 - 88

TEXT: The optimizing control systems with the sampling on-off controller with the dead-zone Δ discussed in this paper find applications in the control of processes with large time-constants and delays. The characteristics of this system are described and the possibilities of the appearance of simple and complex oscillations are discussed. The knowledge of the conditions of appearance of simple oscillations makes it possible to define the behaviour of the system in the steady state, and the frequency and amplitude of the oscillations, as well as to select the optimizing controller parameters for the given object. This paper presents the general precise conditions of the simple oscillations appearance and also provides approximate conditions assuming that the linear part of object
Card 1/2

JB

Conditions of appearance of ...

P/031/62/007/001/007/021
D265/D308

has properties of a low-pass filter. By introducing the concept of the dead angle of control system δ and the equivalent phase shift of linear part of object Φ the conditions of appearance of simple oscillations are obtained after some simplifications in the form of inequalities. The analysis is illustrated by graphs and the region of simple and complex oscillations shown on diagrams. There are 8 figures and 1 table. /B

ASSOCIATION: PAN-zakład automatyki (PAS-Automation Establishment)

Card 2/2

MANCZAK, Kazimierz; TUSZYNSKI, Kazimierz

Extremal control and regulation. Pt. 2. Application.
Przem chem 41 no.2:57-59 F '62.

1. Zaklad Automatyki, Polska Akademia Nauk, Warszawa 1
Zaklad Automatykacji, Instytut Chemii Ogolnej, Warszawa

MANCHAK, Kazimezh
MANCHAK, Kazimezh [Manczak, Kazimierz]

"Experimental determination of the frequency characteristics of control systems" by P.Y.Dekhtiarenko. Reviewed by K.Manchak.
Avtomatyka 8 no.1:94-95 '63. (MIRA 16:3)

1. Institut avtomatiki Pol'skoy Akademii nauk.
(Automatic control) (Dekhtiarenko, P.Y.)

MANCZAK, Kazimierz

Problems of optimizing control in world literature. Archiw
automat 2 no.2:231-254 '63

1. Zaklad Teorii Sterowania, Instytut Automatyki, Polska Aka-
demia Nauk, Warszawa.

POLAND

MANCZAK, Kazimierz

Automation Institute, Polish Academy of Sciences, Dept. of Steering
Theory (Instytut Automatyki PAN, Zakład Teorii Sterowania)

Warsaw, Archiwum automatyki i telemechaniki, No 1, Jan/Mar 1966,
pp 55-73

"Application of regression analysis in identification of static
characteristic of multidimensional technological plants."

L 23288-66

ACC NR: AP6009597

SOURCE CODE: PO/0031/66/011/001/0055/0074

AUTHOR: Marczak, Kazimierz -- Man'chak, K.

17
B

ORG: none

TITLE: Application of regression analysis for identification of static characteristics of multidimensional technological plants

SOURCE: Archiwum automatyki i telemekhaniki, v. 11, no. 1, 1966, 55-74

TOPIC TAGS: function analysis, characteristic equation, least square method, regression analysis

ABSTRACT: In this paper the properties of multidimensional technological plants with complex automation systems are discussed and the problem of identifying their static characteristics using statistical methods is formulated. Using the principle of maximum likelihood, the principle of the least-squares is derived and the method of regression analysis is presented. Regression analysis is applied to identification of the static characteristics of multidimensional technological plants disturbed by random signals. The case of identification of linear multidimensional plants is discussed in detail, introducing variable regression functions with experimental data are given. Orig. art. has: 5 figures and 101 formulas. [Based on author's abstract]

[AM]

SUB CODE: 13, 12/ SUBM DATE: 14Aug65/ ORIG REF: 007/ SOV REF: 008/

OTH REF: /006

Card 1/1 ✓

MANCZAK, Kazimiera

Identification of sugar factory evaporators as plants
controlling pressure and subpressure. Archiw automat
9 no. 1:43-60 '64.

1. Institute of Automatic Control, Department of Steering
Theory, Polish Academy of Sciences, Warsaw.

MANCZARSKA, Hanna

Formalin poisoning of a newborn infant connected with attempted abortion by Boero's method. Ginek. Pol. 33 no.1:91-93 '62.

1. Z Zakladu Medycyny Sadowej AM w Gdansk Kierownik: prof. dr St. Manczarski.

(ABORTION CRIMINAL compl)
(FORMALDEHYDE toxicol)
(INFANT NEWBORN dis)

P.T.A. MANCZARSKA, S.

Mech. + Elec. Engineering

692

631.398.67

Manczarki S. Aerials and Wave Propagation.

„Anteny i rozchodzenie się fal”. Przegląd Telekomunikacyjny. No. 10-11-12, 1950. pp 276-283.

A problem report prepared in the course of preliminary work in connection with the First Congress of Polish Science. It deals with the work so far carried out in respect of the theory of wave propagation, aerial radiation and investigation of ionospheric phenomena, and contains suggestions as to problems subject to scientific solution within the scope of the Six-Year Plan.

MANCZARSKI, S

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Manczarski S. Practical Application of Wave Scattering in Ionosphere.
"Rozprawy z fizyki atmosfery i jej praktyczne wykorzystanie"
(Prace Inst. Łączn. No. 3), Warszawa, 1958, PWT, 48 pp., 20 figs., 6 tabs.

Wave scattering in ionosphere has hitherto been considered a no-
xious and undesirable phenomenon, in view of the increase involved
in the general noise level disturbing radio reception. Nevertheless, the
author set out to investigate ionospheric scattering phenomena from
the point of view of practical benefits. Observations and experimental
work were made as follows: 1) a simple statistical method of measuring the
level strength was worked out, together with the application to investi-
gating ionospheric scattering; 2) a new type of radar called FES-
75 was developed, possessing a number of valuable properties and operat-
ing by means of ionospheric scattering; 3) the structure of the iono-
sphere was studied on the basis of the theory of turbulence and practi-
cal suggestions are advanced as to the use of the ionosphere indication
in the active and passive radio communication; 4) the theory
of surface hydromagnetic waves was studied as applied to the
ionosphere.

R10
11 K10

221.990.677.32 2344
Reduction of Side Lobes in
Directional Antennas. *Manczarski*
(*Archivum Electricitatis*, 1956, Vol. 3, No. 7,
pp. 325-337. English summary, pp. 340-
341.) Discussion of rhombic, broadside,
and end-fire arrays for s.w. communication,
followed by a description of the Type-
/BDD/I end-fire array designed for the
Polish Radio. The array comprised eight
double-dipole elements spaced at $\lambda/4$ with a
90° phase difference between adjacent
elements. A radiation polar diagram is
given.

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MANCZARSKI, S.

521,398.11 : 529,636.3
4318. DOPPLER EFFECT IN IONOSPHERIC PROPAGATION. S. Borowski, S. Jasiński and S. Mancański. Arch. elektrotech. (Warsaw), Vol. 5, No. 2, 543-553 (1956). In Polish.

3

Elect

Measurement of frequency variations due to Doppler effect given by various authors vary widely, even to the extent

of several orders. Some authors associate the appearance of a strong Doppler effect with the great variability of the angle of incidence of the waves on the ionosphere. This paper contains a mathematical analysis of the general problem as well as an analysis of the measurements and observations of the effect. A formula expressing the variation of frequency caused by the motion of the ionosphere has been derived on the basis of geometrical optics. Calculations made using this formula give a small change of frequency. The formula can be used as long as the operating frequency is not too close to the ionospheric maximum usable frequency. In this case geometrical optics is no longer applicable. Near this limit the ionosphere behaves like a selective low-pass filter for the waves returning to the earth, whereby the parameters of this filter are constantly changing. As a result of the changes arising in this manner, a single impulse returning to the earth is broken up into a series of short wave-trains. If these wave-trains are studied with the aid of the Fourier integral, we obtain a wide frequency spectrum which is more or less in agreement with the data obtained by some authors. Analysis shows that the wide spectra appear only in the limiting conditions,

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BORDWSKI, S., JASINSKI, S., ...
which certainly occur considerably less often than the average ones. To confirm this fact experimentally, a series of observations were made at Warsaw and Grodzisk (Poland). The treatment presented by the authors provides an explanation of the correlation between the Doppler effect and the great variability of the angle of arrival of ionospheric waves. In carrying out measurements based on the reception of standard frequencies from distant short-wave radiostations an approach to the limiting conditions should be avoided.

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POLISH TECHNICAL ABSTRACTS

Vol. 26, Nr. 2, 1957

3
2-157

Handwritten notes:
Q1
C1
MUF

Manzarski S. Research over the Probability of Reception of Long-Range Short-Wave Transmission at Frequencies Below and Above the Median Maximum Usable Frequency (MUF).

„Badanie prawdopodobieństwa odbioru krótkofalowych radiostacji dalekodystansowych dla częstotliwości poniżej mediany MUF i powyżej mediany MUF” (Prace Inst. Łączn. No. 2 (4)), Warszawa, 1956, PWT, 17 pp., 18 figs., 1 tab.

This paper describes the different mechanisms of short-wave propagation. Among them particular attention is called to the possibility of short-wave propagation below the level of the F2-layer, after the manner of sound propagation in a whispering-gallery. The mathematical analysis shows that in certain conditions this mechanism allows the propagation of waves at frequency nearly double the maximum usable frequency at classical ionospheric reflections. In the technical literature a conception of wave propagation, similar to sound propagation in the whispering-gallery, is used to explain the radio echo passing around

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Research over the Probability of Reception of Long-²⁸⁷
Range Short-Wave Transmission at Frequencies Below
and Above the Median Maximum Usable Frequency (MUF).

the globe. The concentration of energy, due to the concavity of the ionosphere, which occurs in this case, means that the attenuation of the signal can be relatively insignificant, as was confirmed by measurements. The efficacy of the mechanism considered is based on the fundamental condition of the loss in the upper layer of the ionosphere being very small. In recent years, this fact has been confirmed by measurements, with a view to confirming the thesis that the neglect of certain effective mechanisms of ionospheric wave propagation leads to systematic errors in the preparation of prognosis concerning the optimal traffic frequency. The actual values of the optimal traffic frequency are compared with practical exploitation data. In conclusion, the authors suggest, in order to maintain long range short-wave radiocommunication at high efficiency during the complete sunspot cycle, it is essential that there be available a suitable set of working frequencies (at the range of 5). The number of these frequencies depends upon the peculiarities of the path of the wave; moreover it is necessary to take into consideration the frequencies

of these devices depends upon the peculiarities of the wave
wave: moreover it is necessary to take into consideration the frequencies
above the maximum usable frequency, as well as the frequencies below
the lowest useful high frequency. In the current conditions of knowledge
concerning wave propagation, the precise conformity with the optimum
profile required is in practice insufficient.

MANCZARSKI, S.

Polish participation in the 5th International Conference of the Special Committee of the International Geophysical Year, p. 308.

PRZEGLAD GEOFIZYCZNY. (Polskie Towarzystwo Meteorologiczne i Hydrologiczne)
Warszawa, Vol. 3, no. 3/4, 1958.

POLAND

Monthly List of European Accessions (EELA) LC, Vol. 8, no. 7, July 1959.

Uncl.

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9,9100

AUTHOR: Manczarski, Stefan

TITLE: Drift of electrons in plasma under the influence of an electromagnetic wave

PERIODICAL: Acta geophysica Polonica, v. 9, no. 1-2, 1961, 75-81

TEXT: This paper consists of a theoretical investigation of the problem mentioned in the title, in an attempt to explain the possible amplification of radio signals in the ionosphere. A plane wave is considered, with electric and magnetic vectors E and H respectively, moving along the z-axis and acting on a free electron with mass m and charge e. Fig. 1 shows the situation, with the E and H vectors along the x- and y-axes, respectively. The force on this electron is expressed by the components f_x and f_z and the respective accelerations are: in the x-direction:

$$\frac{f_x}{m} = \frac{dv_x}{dt} = \frac{Ee}{m} - \frac{He}{m} v_z; \tag{1}$$

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