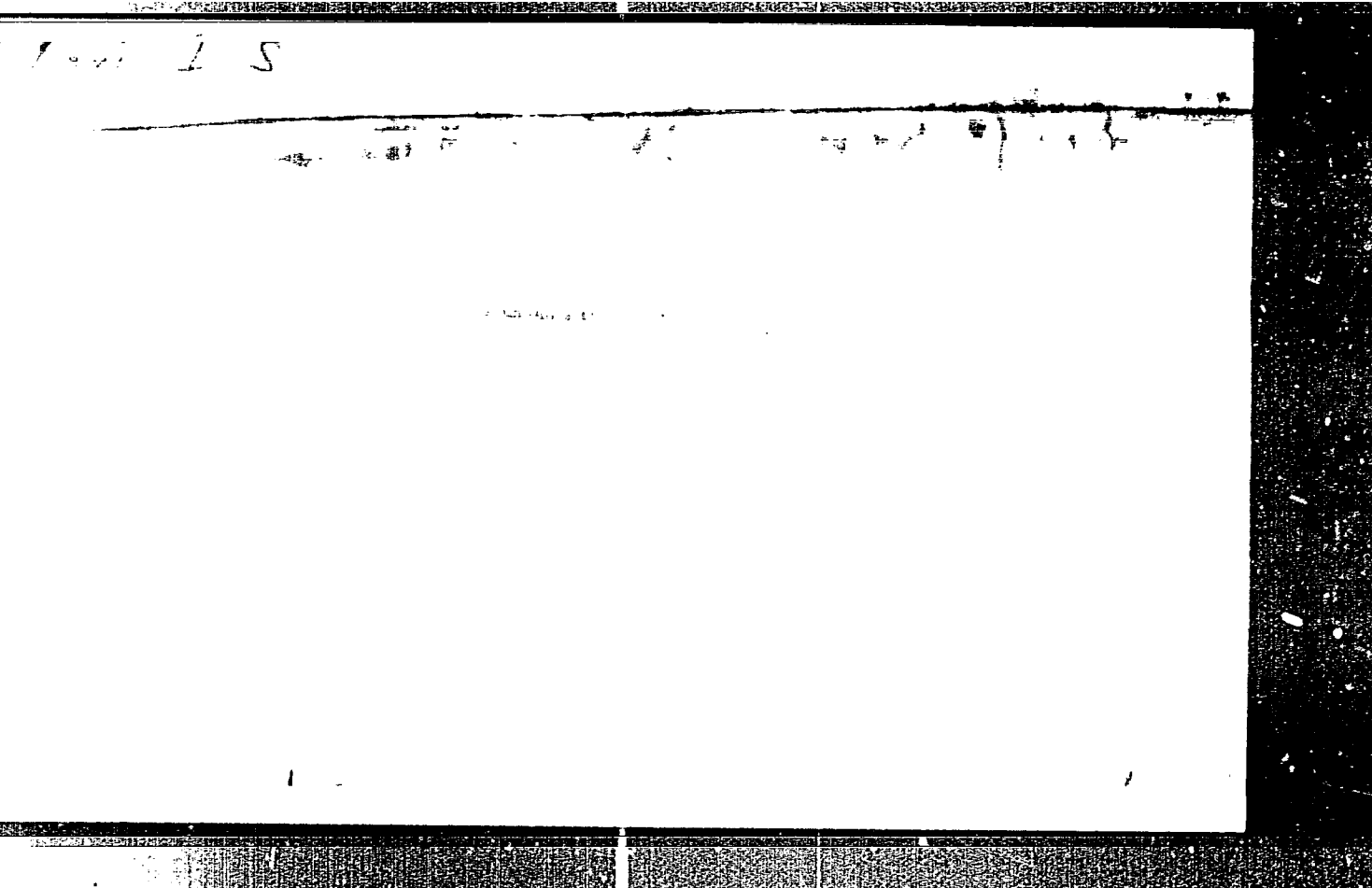


YUR'YEV, Yu.K.; LEVI, I.S.

Contact conversions of trimethylene oxide and trimethylene glycol. Zhur.ob.khim.23 no.12:2047-2052 D '53. (MLRA 7:2)

1. Moskovskiy Gosudarstvennyy universitet, Laboratoriya organicheskoy khimii im. N.D.Zelinskogo. (Trimethylene)



USSR/General Problems of Pathology - Tumors. Experimental Therapy. U.

Abs Jour : Ref Zhur - Biol., No 21, 1958, 98236

Author : Novikova, M.A., Levi, I.S., Koshlov, A.S.

Inst : -

Title : On the Antineoplastic Activity of Alline.

Orig Pub : Antibiotiki, 1957, 2, No 4, 41-46

Abstract : The antineoplastic activity of alline (I; oxide 3-allyl-
-l-cysteine) was studied in experiments with the ascitic
tumor of Ehrlich (49 mice), adenocarcinoma of mammary
gland "RSH" (79 mice), sarcoma 45 (20 rats) and on sarco-
mas of rats induced by 9.10 - dimethylbenzanthracene
(10 animals). I was introduced (starting with the 4-7th
day from the moment of tumor inoculation) intraperitone-
ally daily for 20 days in dosages of 100 mg/kg (mice) and
200 mg/kg (rats). Animals were killed on the 21st day
and, on the basis of obtained data, the percentage of in-
hibition of tumor growth was calculated. I did not produ-

ce

Card 1/2

USSR/General Problems of Pathology - Tumors. Experimental Therapy. U.

Abs Jour : Ref Zhur - Biol., No 21, 1958, 98236

any effect on the growth of investigated tumors; there-
fore the authors consider Myler's data (1951) on the an-
tineoplastic effect of I to be erroneous. -- A.I. Krav-
chenko

Card 2/2

BERLIN, A.Ya.; LEVI, I.S.

Bis(β -chloroethyl)amines, derivatives of urea and thiourea.
Zhur.ob.khim. 33 no.3:860-865 Mr '63. (MIRA 16:3)

1. Institut eksperimental'noy i klinicheskoy onkologii
AMN SSSR.

(Amines) (Urea)

LOVE, J.

Colors and industrial production. p. 1312. Is it more economical to introduce roller conveyers or fork lift trucks in brewery transportation? p. 1313. (ISIRIWA, Vol. 2, no. 11, 1954. Beograd, Yugoslavia)

SU: Monthly List of East European Associations, (Zeml), 10, Vol. 4, no. 4, Apr 1958, Uncl.

LEVI, Josif, ing. (Beograd, Knesa Milosa 43/III)

The development and the choice of type of a nuclear thermoelectric power plant with regard to the domestic possibilities of its construction. Tehnika Jug 17 no.1:77-84 Ja '62.

1. Councillor of the Federal Chamber of Industry, Beograd.

(Yugoslavia—Atomic-power plants)

Y/001/62/000/001/002/003
D288/D303

AUTHOR: Levi, Josif, Advisor

TITLE: Development and selection of a type of atomic power plant with particular reference to the possibilities of manufacturing the necessary equipment domestically

PERIODICAL: Tehnika, no. 1, 1962, 77-84

TEXT: The article deals with problems relating to the construction of a 100-150 mW atomic power plant in Yugoslavia with particular reference to the possibilities of domestically manufacturing the required equipment. In giving a short summary of scientific and technological achievements in constructing atomic power plants in Western countries, the author considers an atomic power plant with a graphite moderator and gas or heavy water as a coolant as the most suitable type to be built in Yugoslavia. Analyzing the capabilities of Yugoslav industrial enterprises considered adequate ✓

Card 1/2

Development and selection of a type... Y/001/62/000/001/002/003
D288/D303

to produce the simplest equipment required for such a plant, the author states that one of the main problems will consist in constructing the fuel supply and manipulating equipment. An additional and serious problem is the lack of trained personnel. There are 4 figures.

ASSOCIATION: Savezna industrijska komora (Federal Chamber of Industry) Belgrade ✓

Card 2/2

LEVI, Josif, inz.

Engineering. Masionogradnja 5 no.2:19420 JI '62.

LEVI, Arlo

In the villages of Basilicata. Vokrug sveta no.5:22-25 My '55.

(MIRA 8:6)

(Basilicata--Description and travel)

YUGOSLAVIA/Diseases of Farm Animals - Diseases Caused by Helminths. R

Abs Jour : Ref Zhur - Biol., No 6, 1950, 26314

Author : Winterhalter, M., Rukavina, J., Levi, L.

Inst : -

Title : Intraruminal Application of Carbon Tetrachloride in Distomatosis of Large Horned Cattle.

Orig Pub : Veterin. arh., 1957, 27, No 7-8, 219-220

Abstract : When CCl_4 is introduced into the rumen in therapeutic dosages it has a toxic effect. Therefore, it can not be used for the treatment of distomatosis by this method.

Card 1/1

LEVI, L.
APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000929510012-

Prevention. Za bezop.dvizh. 5 no.8:14, Ag '62. (MIRA 15:8)
(Leipzig--Traffic safety)

MITCHELL, L.; LEVI, L.

Resonance scintillation counter. Doklady BAN 17 no.6:539-541 '64.

1. Chair of Atomic Physics, State University of Sofia. Predstavleno
akad. Kh. Ya. Khristovym.

LEVI, L.I.

Role of the central nervous system in the development of muscular contractions. *Biul. eksp. biol. i med.* 38 no.9:30-31 S '54. (MIRA 7:12)

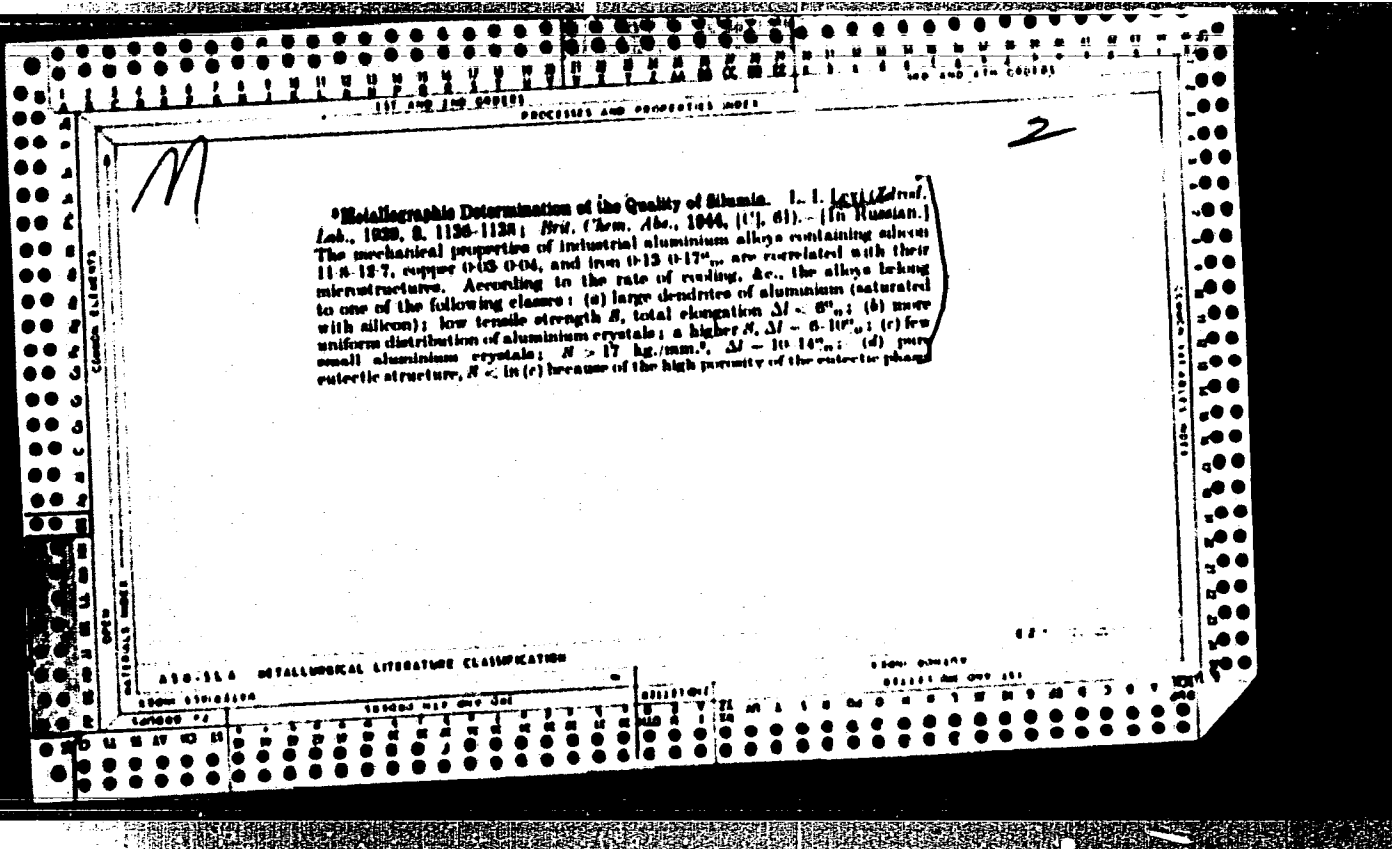
1. Iz laboratorii evolutsionnoy fiziologii (sav. prof. Ye.K. Zhukov) Fiziologicheskogo instituta imeni A.A. Ukhtomskogo (dir. prof. N.V. Golikov) Leningradskogo gosudarstvennogo universiteta.

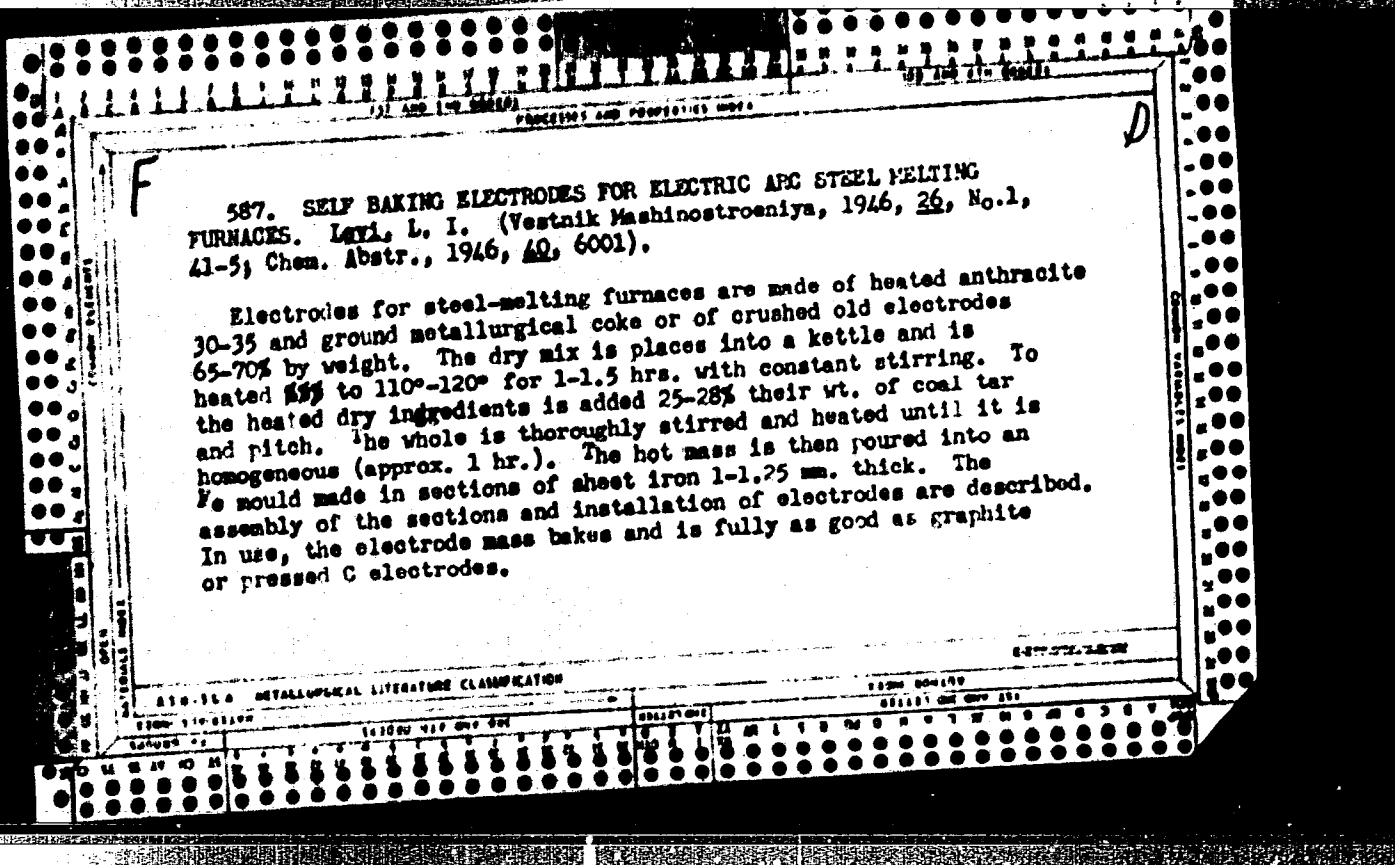
(MUSCLES, physiology,

contractions, regulation by CNS in frogs)

(CENTRAL NERVOUS SYSTEM, physiology,

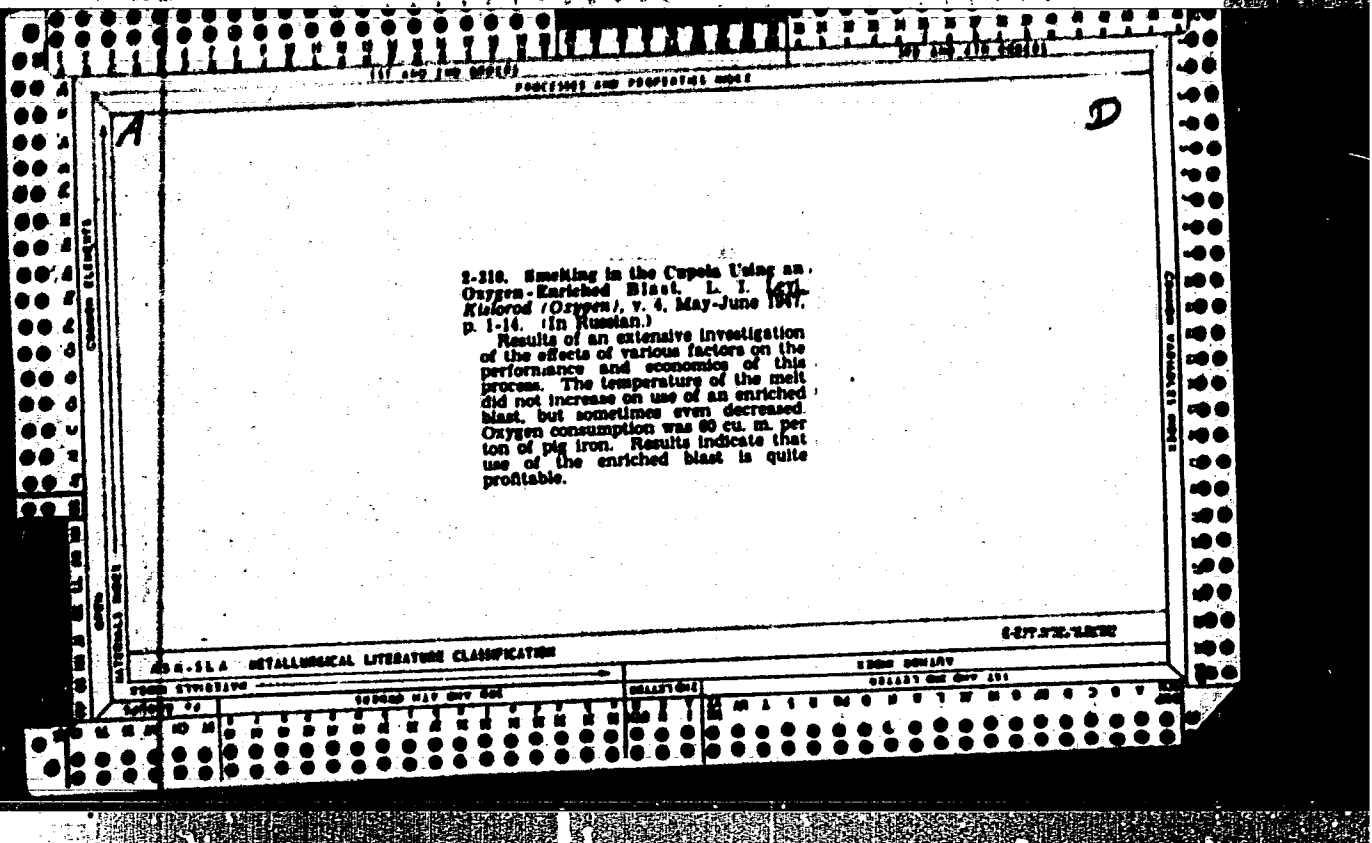
regulation of musc. contractions in frogs)





that of metal picked up with air blast. Oxygen-enrichment of the blast causes the temperature of the cast to reach about 1800° C. and it gives a much smoother working of the cupola. (3) Oxygen-enrichment of the blast decreases the iron in the slag, increases the sulphur and manganese in the metal, and decreases the carbon picked up by the metal. The carbon in the metal is, in general, unchanged. (4) The (C), (S) ratio of the stack gas is increased. (5) The ratio heat-in-metal; heat-in-gas is increased from 0.96-1.80 to 1.6-3.2.

A higher stack should, theoretically, give an even greater efficiency. The experiments showed the possibility of at least partially replacing the duplex process for the melting of high-quality cast iron and wrought iron by the use of oxygenated blast in the ordinary cupola. It was also found that the coke in the charge can be reduced by about 4% and still give metal at an elevated temperature. The average oxygen consumption during the trials was 60 cu.m./ton of iron cast.—S. K.



LEVI, L I

1A JLT

USSR/Steel - Physical properties
Cast steel

Mar 1947

"Mechanical Properties of Chilled Steel Casting,"
L I Levi, 3 pp

"Stal'" Vol VII, No 3

Study of the factors affecting the mechanical properties of chilled steel casting shows that the structure and quality of the casting improves with a decrease in the cross-section of the casting. Illustrated with microphotos and tables.

319

LEVI, L.I., kandidat tekhnicheskikh nauk.

~~XXXXXXXXXXXXXXXXXXXX~~
Steel solidification rates in sand and chill molds. Vest.nash.
27 no.7:52-56 JI '47. (MLRA 9:4)
(Steel castings) (Solidification)

LEVI, L. I.

Kislород v metallurgii litesnogo proizvodstva. (Vestn. Mash., 1949, no.4,
p. 28-34)

Includes bibliography.

Oxygen in the metallurgy of founding.

DLC: TN4.V4

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of
Congress, 1953.

185T51

USSR/Engineering - Foundry, Technology Feb 54

"Application of Oxygen for Improving the Cupola
Furnace Process," Docent I. Le/Levl, Cand Tech
Sci, Laureate of Stalin Prize, "Dinamo" Plant

"Tibey Proiz" No 2, pp 21-26

Analyses and compares data published in the USSR
and other countries. In Levl's opinion, countries
outside of USSR are considerably behind in theo-
retical and exptl development of method and its
industrial use. Concludes published results of
USSR investigations fully reveal tech advantages
of using oxygen to intensify and improve

cast-iron manufg processes. Bibliography
lists 21 titles, 9 by Soviet authors.

185T51

PA 19776

USSR/Metals - Steel, Melting, Equipment . . . Aug 51

"Concerning Endurance of the Bottom of Electric-Arc Furnaces With Acid Lining," L. I. Levi, Laureate of Stalin Prize, Cand Tech Sci, "Dinamo" Plant imeni Kirov

"Litey Proiz" No 8, pp 23

Discusses in general life of acid-type bottom lining of elec-arc furnaces used for steel melting and presents case when 4-ton furnace withstood 15,000 heats and still is in good operational condition. Describes procedure of lining and starting the furnace.

19776

USSR/Metals - Bronze, Properties

Oct 51

"Concerning Mechanical Properties of Tin Bronze and Possibilities for Their Improvement by Heat Treatment," L. I. Levi, Cand Tech Sci, E. V. Khronzheh, Enggr, "Dinamo" Plant Imeni Kirov

"Litey Proizvod" No 10, pp 31, 32

"Disproves possibility of improving mech properties of cast bronze by its normalization from 600-660o as indicated in paper published by Enggr D. N. Zaslavskiy in "Vest Mashinostroy" (Herald of Mech Bldg) No 9, 1950. Describes

1987/4

USSR/Metals - Bronze, Properties
(Contd)

Oct 51

expts to establish effect of overheating tin bronze in melting, and pouring temp on properties of secondary metal. Optimum temp is 1,200-1,250o.

1987/4

LEVI, L. I.

LEVI, L. I. CAND TECH SOI. LAUREATE OF STALIN PRIZE

USSR/Metals - Aluminum, Alloys,
Properties

Nov 51

"On Certain Peculiarities of Manufacturing Castings
Out of Modified Silumin," L. I. Levi, Cand Tech
Sci, Laureate of Stalin Prize, "Dinamo" Plant Invent
Kirov

"Litsey Priozvod" No 11, pp 16-18

Investigates process of silumin modification and
effect of re-melting silumin on its physicomech
properties. Attempts to clarify phenomenon of
sporadic preservation of high mech properties by
silumin, modified with sodium, after multiple
re-melting. Considers presence of residual sodium
1989cd

Nov 51

USSR/Metals - Aluminum, Alloys,
Properties (Contd)

as chief cause of high properties and discusses
effect of pouring temp and of sodium and time of
holding after modification.

1989cd

LEVI, L. I.

Technology

Oxygen in cupola furnace smelting, Moskva, Mashgiz, 1952.

Monthly List Of Russian Accessions. Library of Congress, December 1952. Unclassified

CA

9

Pressure-activated shrink head. L. I. Pantakov and L. I. Javt. *Ladina Proizvodstva* 1953, No. 2, 2-6.—The service of a head in preventing shrinkage cavities is discussed. The action of various types of shrink head inserts: gas generating, reacting exothermally with the molten metal, and other types is analyzed. M. Hensch

Iron/Steels - Casting, Methods

Mar 52

"Blind Risers Under Pressure," Prof L. I. Fanta-
lov, Dr Tech Sci, L. I. Lavr, Gerd Tech Sci,
"Dinamo" Plant Imeni S. M. Kirov, Moscow Inst of
Steel Imeni I. V. Stalin

"Itay Proizvod" No 3, pp 2-6

Studies dependence of vol of shrinkage cavities
on shape of casting and ratio between mass of
casting and cooling surface. Describes exper-
with blind risers using various pouring pres-
sures and methods for establishing pressure in-
side of risers. Evaluates application of risers,
212292

acting under pressure, as highly effective method
for steel conservation and for obtaining high per-
centage of sound castings.

LEVI, L. I.

212292

1. LEVI, L. I.
2. USSR (600)
4. Steel - Electrometallurgy
7. Oxygen in the production process of "electro-steel." Lit. proiz., No. 10, 1952

LEVI, L.I.

2

Casting properties of silicon and silicon-lead brass. L. I. Levi
(Leningrad *Prizvodstvo*, 1953, No. 7, 2-3). -Casting properties of
Si-brass (Cu 79-81, Si 2-5-4-5%) and of Si-Pb brass (Cu 79 Si,
Si 2-4-4.5, Pb 2-4%) and their suitability for use in bearings were
investigated and compared with the properties of bronzes (contain-
ing Sn 5-8, Zn 5-8, and Pb 5-3%) used for the same purposes.
The Si-brass cast at the same temp. as bronze flows much more
easily and is therefore more suitable for thin-walled castings.
Best casting and antifriction properties are found in brasses with
3-4% Si and 3-4% Pb. Addition of greater amounts of Si and the
presence of Fe (> 0.8%) and P (> 0.1%) cause the castings to
become very brittle. The presence of Al (up to 1.5%) in the Si-brass
contributes to higher ultimate tensile strength, greater ductility, and
better antifriction properties. The best castings are obtained by the
centrifugal method. METALL. ABSTRACTS (R. I. C.)

o/
MET

LEVI, L. I.

USSR/Miscellaneous

Card 1/1 : Pub. 61 - 4/23

Authors : Levi, L. I.

Title : About metallic reguli in pig-iron casting

Periodical : Lit. proizv. 4, 9-11, July 1954

Abstract : The meaning of reguli in foundry and metallurgical terminology, is explained. The mechanism of formation of metal reguli, is explained. Reguli are often discovered in intermediate elements of the pouring system which harden later than other elements and in these cases the reguli are connected with the basic casting metal by a small bridge with an area of about 0.5 - 2.0mm². The regulus phenomenon is not observed in profile casting of steel objects. Six USSR references (1946-1952). Tables; illustrations.

Institution : ...

Submitted : ...

LEVI, L.I., laureat Stalinskoy premii; BARDIN, I.P., akademik, redaktor;
IVANOV, D.P., kandidat tekhnicheskikh nauk, retsenzent; KRYLOV, V.I.
inshtener, redaktor; TIKHONOV, A.Ya., tekhnicheskiy redaktor.

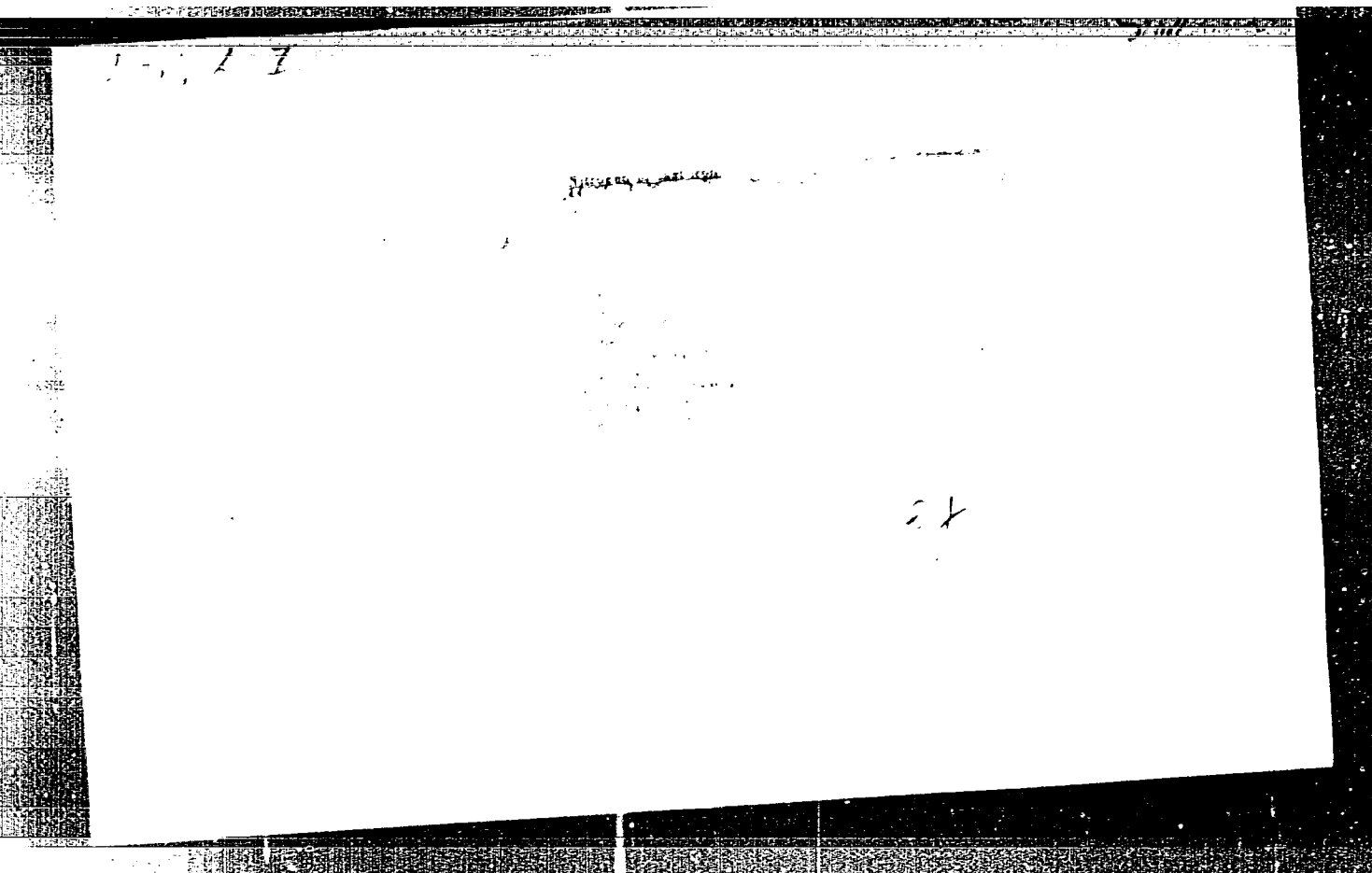
[Oxygen in cast iron production] Kislород v protsessakh polycheniya
chugunogo lit'ia. Pod red. I.P.Bardina. Moskva, Gos.nauchno-
tekhn.isd-vo mashinostroitel'noi lit-ry, 1955. 274 p. (MLRA 8:11)
(Cast iron--Metallurgy) (Oxygen)

L. I. LEVI

USSR

Melting in a basic-lined cupola. L. I. Levi. *Litovsk*
Preprints 1955, No. 4, 7-8. Reactions taking place
 in a basic-lined cupola were examined from the standpoint of
 phys. chemistry with the conclusion that a simultaneous
 elimination of S and P is not possible here under any con-
 ditions. This conclusion was then checked by expts. run in
 a production cupola and in a 180-mm. diam. lab. model of it.
 The former was lined 1.3 m. above the tuyères with mag-
 nesite brick, and the latter with a tamped mixt. of ground
 magnesite brick, graphite, and clay. Several exptl. series,
 minutely described, lead to the conclusion that S of the
 order of 0.01% can be obtained by running the cupola hot,
 as by using up to 60% O or preheating the blast to 450-
 510°, permitting tapping at 1500°. The charge must be
 fluxed to a high-melting basic slag. A mixt. of CaC₂, 6,
 CaCO₃, 5, and CaP₂, 3-5% was found suitable for fluxing, its
 consumption amounting to 7-15% of the metallic charge.
 Charging from 100% pig to 100% scrap produced equally
 good results. The relation between slag basicity and the
 final S content is not direct but is largely a function of temp.
 Graphs give the changes of C, Si, Mn, P, and S concns. as a
 function of O in the blast, tapping temp., slag compn., and
 of amt. of turnings added.

J. D. Cat



LEVI, L.I., kandidat tekhnicheskikh nauk, laureat Stalinskoy premii.

Oxygen in metallurgy. Nauka i zhizn' 22 no.6:14-16 Je '55.
(Metallurgy) (MIRA 8:8)

LEVI, L.I.

Nitrogen in cast iron. Lit. proisv. no.2:32 P '56. (MLRA 9:6)
(Cast iron--Analysis) (Nitrogen)

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000929510012-2

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000929510012-2"

LEVI, L.I.

25(1)

p. 3

PHASE I BOOK EXPLOITATION

SOV/1439

Spravochnik metallista v pyati tomakh, t. 3, kn. 1 (Metals Engineering Handbook in Five Volumes, Vol. 3, bk. 1) Moscow, Mashgiz, 1958. 560 p. 50,000 copies printed.

Ed. (Title page): V.S. Vladislavlev, Professor (Deceased); Ed. (Inside book): V.I. Krylov, Engineer; Tech. Ed.: T.F. Sokolova; Editorial Board: N.S. Acherbman (Chairman and Chief Ed.), Doctor of Technical Sciences, Professor, V.S. Vladislavlev, Professor (Deceased), A.N. Malov, Candidate of Technical Sciences, S.N. Pozdnyakov, A.Ya. Rostovyykh, G.B. Stolbin, and S.A. Chernavskiy; Managing Ed. for Reference Literature: V.I. Krylov, Engineer.

PURPOSE: The book is a reference book for technicians and engineers working in the field of machinery design and in production.

COVERAGE: The book covers the following: engineering specifications, treatment and use of cast iron, steel and carbides, heat treatment of steel and cast iron, specifications, treatment and use of nonferrous metals and nonmetallic materials. I.Z. Yasnogorskiy, V.P. Vologdin, N.V. Geveling are mentioned as

Card 1/14

Metals Engineering Handbook in Five (Cont.)

SOV/1439

having contributed to this field. There are 137 references of which 121 are Soviet, 13 English, 1 German, 1 Italian and 1 Polish.

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GO/jmr
5-28-59

Card 14/14

AUTHOR: Levi, L.I. SOV/128-58-11-12/24

TITLE: Problems of the Content and Determination of Nitrogen, Hydrogen and Oxygen in Cast Iron (Voprosy sodержaniya i opredeleniya azota, vodoroda i kisloroda v chugune)

PERIODICAL: Liteynoye proizvodstvo, 1958, Nr 11, pp 20-23 (USSR)

ABSTRACT: As the study of methods to determine the effect of gaseous elements on cast iron properties was not sufficiently developed, investigations in this field were carried out by I.N. Bogachev, A.A. Gorshkov, V.P. Revebtsov, M.S. Rybakov, P.P. Arsent'yev and Yu.A. Klyachko. A series of tests was carried out at the "Dinamo" plant with the participation of engineers A.G. Atlasov, O.P. Levina and S.V. Shalygin. It was stated that the most accurate method of determining hydrogen, oxygen and nitrogen in cast iron was melting in vacuum. Temperatures of the maximum gas separation were found and the effect of crucible material and of the ambient atmosphere on the analysis results was determined.

Card 1/2

SOV/128-58-11-12/24

Problems of the Content and Determination of Nitrogen, Hydrogen and Oxygen
in Cast Iron

There are 4 tables, 1 graph and 10 references, 8 of which
are Soviet, 1 English and 1 German.

1. Cast iron--Properties 2. Nitrogen--Determination 3. Hydrogen
--Determination 4. Oxygen--Determination 5. Vacuum systems
--Performance

Card 2/2

BERG, P.P., doktor tekhn.nauk; BIDULYA, P.N., doktor tekhn.nauk; GRECHIN, V.P., kand.tekhn.nauk; DOVGALEVSKIY, Ya.M., kand.tekhn.nauk; ZHUKOV, A.A., inzh.; ZINOV'YEV, N.V., inzh.; KRYLOV, V.I., inzh.; KUDRYAVTSEV, I.V., doktor tekhn.nauk; LANDA, A.F., doktor tekhn.nauk; LEVI, L.I., kand.tekhn.nauk; MALAKHOVSKIY, G.V., inzh.; MIL'MAN, B.S., kand.tekhn.nauk; SOBOLEV, B.F., kand.tekhn.nauk [deceased]; SKOMOROKHOV, S.A., kand.tekhn.nauk; STEPIN, P.I., kand.tekhn.nauk; USHAKOV, A.D., kand.tekhn.nauk; FRIDMAN, L.M., inzh.; KHRAPKOVSKIY, E.Ya., inzh.; TSYPIN, I.O., kand.tekhn.nauk; SHKOL'NIKOV, E.M., kand.tekhn.nauk; POGODIN-ALEKSEYEV, G.I., prof., doktor tekhn.nauk, red.; BOLKHOVITINOV, N.F., prof., doktor tekhn.nauk, red.toms; LANDA, A.F., prof., doktor tekhn.nauk, red.toms; RYBAKOVA, V.I., inzh., red.isd-va; SOKOLOVA, T.F., tekhn.red.

[Handbook on materials used in the machinery industry] Spravochnik po mashinostroitel'nym materialam; v chetyrekh tomakh. Pod red. G.I.Pogodina-Alekseeva. Moskva, Gos.nauchno-tekhn.isd-vo mashinostroit.lit-ry. Vol.3. [Cast iron] Chugun. Red.toms N.F.Bolkhovitov i A.F.Landa. 1959. 359 p. (MIRA 13:1)
 (Machinery industry) (Cast iron)

LEVI, L. I.

CONFIDENTIAL

14(0) PAGE 1 BOOK REPRODUCTION 807/8216

Abstracts from USSR. Institute of Metallurgy (Moscow) Metallurgiya, 1977, 131-137; (No. 12) (Metallurgy in the USSR, 1977 - 1977, Vol. 8) Moscow, Metallurgizdat, 1979, 813 p. Series title: Metallurgiya, 5,000 copies printed.

Ed. (Title page): I. P. Burdits, Academician; Ed. (Inside book): G. V. Popov; Tech. Ed.: P. G. Isakht'yeva.

REMARKS: This book is intended for metallurgists.

SCOPE: The article in this collection presents historical data on the achievements of Soviet metallurgy, both ferrous and nonferrous, during the period 1917-1977. Advances in theory and practical application are described. The article describes the present status of industrial metallurgy in the USSR and the role of metallurgy in the future. Advances in theory and practical application are also discussed. The articles are accompanied by a large number of references. For further coverage, see Table of Contents.

Plasma-arc, Candidates of Technical Sciences; and A. G. Himmov, Candidate of Technical Sciences. (Institute of Metallurgy, Acad. A. A. Baykov, USSR Academy of Sciences) Achievements in Metallurgical Steel and Fire Production 101

Changes in engineering specifications and improvements in production techniques and quality of time and solid waste in the USSR since 1940 are discussed. Further progress in this field is predicted.

Khuda, A. I., Professor, Doctor of Technical Sciences. (DITV) Forging and Stamping Methods 113

This is a historical survey of developments in forging and stamping processes in Russia from pre-revolutionary times up to 1977.

Levi, L. I., Candidate of Technical Sciences. (Institute of Metallurgy of Machine Building) Production of Castings 111

The paper traces the general course of development and discusses problems in the theory of casting, casting alloys, heat treating processes, melting and core materials, nonferrous alloys, special casting methods (permanent mold casting, die casting, centrifugal casting, centrifugal casting, investment casting, etc.), equipment, automation, and automation.

Kulshreshtha, K. P., Candidate of Technical Sciences; and G. V. Samoylov, Candidate of Technical Sciences. (Institute of Metallurgy, Acad. A. A. Baykov, USSR Academy of Sciences and Institute of Powder Metallurgy, Ukrainian Academy of Sciences) Powder Metallurgy 117

The article is a general survey of the development and present state of powder metallurgy in the USSR. Theoretical and practical aspects of the preparation of sintered and sintered metal products are discussed.

Ryzhakov, E. E., Corresponding Member, USSR Academy of Sciences; E. O. Chernikov, Professor, Doctor of Technical Sciences; A. A. Yezhov, Candidate of Technical Sciences; and E. Kh. Shorunov, Candidate of Technical Sciences. (Institute of Metallurgy, Acad. A. A. Baykov, USSR Academy of Sciences) and (Institute of Polymer Chemistry) Progress in the Science of Building Metals in the USSR 124

The authors discuss the studies that have been made in the USSR of the theoretical aspects of welding, beginning in the latter part of the nineteenth century. Specific topics are: investigation of the arc, March 7/75

18(5)

SOV/12²-59-7-18/25

AUTHOR: Levi, L.I., Candidate of Technical Sciences

TITLE: Shape of Certain Elements of Runner Systems

PERIODICAL: Iiteynoye Proizvodstvo, 1959, Nr 7, pp 42-43 (USSR)

ABSTRACT: The importance of an even flow of metal through the runners of the casting molds without any damage to the molds has been demonstrated since long time. Despite great discussions among the experts many elements of the casting molds are not yet well enough studied. This is explained by the fact that many leading plants are working without any rationalized design. In consequence of this fact, the results of generous experimental work published in France are of great interest for us (in Centre Technique des Industries de la Fonderie - Foundry Trade Journal, Vol 105, 1958, Nr 2,196). There follows the description of French experiences. It is recommended that these standards be accepted as GOST and shop standards for foundries in the USSR too. There are 7 diagrams

Card 1/1

AKSENOV, P.N.; BERG, P.P.; GODASHKOV, N.M.; VEYNIK, A.I.; GORSHKOV, A.A.;
ZHAROV, N.T.; ZHUKOV, A.A.; ZOROKHOVICH, I.Z.; KUMANIN, I.B.;
LEVI, L.I.; LYASS, A.M.; MARIYENBAKH, L.M.; ORLOV, O.M.; PORUCHI-
KOV, Yu.P.; RABINOVICH, B.V.; STOLBOVOY, S.Z.; VEYSEL'SON, B.Yu.;
VASILEVSKIY, P.F., red.; KLOCHNEV, N.I., red.; KONSTANTINOV, L.S.,
red.; POLYAKOV, Ya.G., red.; MARKIZ, Yu.L., red.isd-va; UVAROVA,
A.F., tekhn.red.

[Theory of founding processes] Voprosy teorii liteynykh protsessov.
Moskva, Gos.nauchno-tekhn.isd-vo mashinostroit.lit-ry, 1960. 692 p.
(MIRA 13:7)

(Founding)

20221

S/128/60/000/006/006/007/XX
A104/A133

18.1110

AUTHORS: Levi, L. I. and Khoronzhek, E. V.

TITLE: The effect of aluminum on the properties of deoxidized carbon steel

PERIODICAL: Liteynoye proizvodstvo, no. 6, 1960, 43-47

TEXT: The authors report on the difficulties encountered in the production of thin-walled steel castings due to their inclination to cracks, depending on the casting conditions and the presence of Al, O, N, H etc. in the metal. The final results depend on the deoxidation which alters some of the sulfides and nitrides and the quantity of nitrogen in steel. Methods and results of four series of tests carried out to determine the effect of 0.5 - 4.2 kg/ton aluminum on the physical, mechanical and casting properties of mild electric steel are described. Tests were part of the Graduation Project of V. B. Livshits, student of the Moskovskiy institut stali (Moscow Steel Institute) carried out under the supervision of L. I. Levi in cooperation with A. S. Murakhin, Z. P. Dubinskiy, D. T. Karaseva, E. P. Rink, O. P. Levina, O. K. Konenko-Gracheva, Yu. A. Chirvo, V. V. Panin, S. I. Opryatn, X

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20221

The effect of aluminum on the...

S/128/60/000/006/006/007/XX
A104/A133 ✓

V. I. Petrov and S. V. Shalygin. During test 1 the 25Л(25L) electric steel was melted by the conventional method and tapped into a 4 ton ladle to which pieces of 1.5 - 3.43 kg/ton pure aluminum were added. Steels were held in the ladle until 1,520°C and used for castings tending to hot cracks. The tendency to hot cracks, shrinkage factor, gas content, magnetic, physical and mechanical properties were determined. A description of the inspecting method is given. The tests 2 and 3 were performed in induction furnaces designed by "Dinamo" and TsNIITMash. Test 2 included acid electric steel containing 0.27% C, 0.37% Si, 0.58% Mn, 0.039% P and 0.038% S. For test 3 the charge consisted of 9.43 kg steel cuttings containing 0.06% C, 0.48 kg synthetic cast iron and ferroalloys. Ferromanganese was added correspondingly to the melting stage, followed by ferrosilicon 2 minutes prior to teeming. Aluminum was added to the bottom of ladle. The steel was heated to 1,650°C - 1,700°C and tapped into the ladle at 1,600 - 1,650°C. The specimens of test 3 were poured at 1,550°C. The physical and mechanical properties were tested on wobblers specimens subjected to the usual annealing. The results of the chemical analysis and the mechanical tests are shown in Table 2. In all cases increased quantities of added and residual aluminum improved the steel flowability. Attention is drawn to the inferior properties of the Nos. 6

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S/128/60/000/006/006/007/XX
A104/A133

The effect of aluminum on the...

10 castings compared to Nos. 11 - 18 castings. Test 4 dealt with the effect of aluminum on the formation of hot cracks during deoxidation. The specimens were inspected by the magnetic defectoscopy method. The results coincide with the recommendations in Reference 4 (N. N. Dobrokhotov, "Liteynoye proizvodstvo", no. 12, 1958) advising the addition of considerably higher quantities of aluminum. A residue of 0.25% aluminum has no adverse effect on steel containing 0.20 - 0.25% oxygen, but improves its casting properties. The interaction of nitrogen and aluminum deserves special attention. Nitrogen improves the tensile strength of iron, mild steel and cast iron, while decreasing ductility of iron and carbon steel due to the presence of phosphorus. Carbon and oxygen have analogous effect. Less than 0.5% Al have no effect on iron, free from other substances but affect the properties of steels containing oxygen, nitrite or sulfur. The fractures of acid electric steel castings contain 0.005 - 0.01% nitrogen. Sufficient quantities of free aluminum in steel bind most of the nitrogen into aluminum nitride. Contradictory data on aluminum nitride and also its favorable effect on steel are mentioned. In steel casting Al is an intensive deoxidizer and paralyzes the adverse effect of nitrogen and by formation of Al_2S_3 sulfide sometimes also that of sulfur. Al controls the number of sulfide inclusions and, by bind.

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The effect of aluminum on the...

S/128/60/000/006/006/007/XX
A104/A133

ing oxygen and nitrogen, eliminates the adverse effect of phosphorus. These factors explain the diminished tendency to hot cracks of cast acid carbon electric steel to which 2 - 4 kg/ton aluminum were added. There are 3 figures, 3 tables and 20 references: 17 Soviet and 3 non-Soviet. X

Table 2:

{1} Conventional number of heat; (2) quantity of Al added, in kg/t; (3) chemical composition, in %; (4) mechanical properties; (5) characteristics and size of non-metallic impurities; (6) magnitude of natural grain (size); (7) gas content in %; (8) indices of the technological specimens as to the tendency of steel to crack formation; (9) many fine sulfides and Al_2O_3 - size 4; (10) high; (11) many big and fine sulfides, Al_2O_3 crystals are present - size 4; (12) single fine silicate and sulfide inclusions - size 2; (13) isolated by sulfide and silicate inclusions - size 2; (14) considerable less; (15) big sulfide, silicate and Al_2O_3 - inclusions - size 4; (16) idem; (17) isolated sulfide inclusions, few Al_2O_3 - inclusions - size 1; (18) idem; (19) idem; (20) isolated big silicate and sulfide inclusions. Few fine Al_2O_3 - inclusions - size 3; (21) differ little from each other; (22) big sulfide and silicate inclusions - size 3, (23) few

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20221

The effect of aluminum on the...

S/128/60/000/006/006/007/XX
A104/A133

Table 2: (continued)

big silicate inclusions and few fine Al₂O₃ crystals - size 2; (24) isolated big sulfide inclusions and big Al₂O₃ crystals - size 4; (25) many fine Al₂O₃ crystals. There are silicate inclusions - size 4.

Условие и номер плавки Классификация по ГОСТ 9 Алюминий в %	3) Химический состав в %						4) Механические свойства						5) Характеристики и балл неметаллических включений	6) Величина пористости зерна (балл)	7) Содержание газов в %			8) Показатели технологической пробы на склонность стали к образованию трещин		
	Al	C	Si	Mn	P	S	σ _т	σ _в	δ ₅	ψ	α _к в кг/см ²	при 20°			при -30°	O	N		H	
	в %/мм ²		в %		в %															
6	1,5	0,10	0,20	0,22	0,37	0,03%	0,014	22,8	44,5	100	20,2	21,8	4,30	1,13	23) Много мелких сульфидов и Al ₂ O ₃ - балл 4	8	0,00619	0,02008	0,00016	78) Высокая
7*	2,0	0,16	0,24	0,20	0,25	0,041	0,049	-	-	-	-	-	4,16	1,10	24) Много крупных и мелких сульфидов. Есть кристаллы Al ₂ O ₃ - балл 4	7	0,00777	0,00911	0,000319	.
8	2,5	0,17	0,24	0,30	0,31	0,038	0,047	22,9	45,5	121	24,8	30,4	3,80	1,83	24) Единичные мелкие включения силикатов и сульфидов - балл 2	7	0,00908	0,01130	0,000279	.
9	3,0	0,29	0,17	0,12	0,21	0,041	0,045	22,9	40,1	107	20,1	21,8	3,30	1,27	25) Единичные крупные включения сульфидов и силикатов - балл 2	8	0,00372	0,02392	0,000299	14) Значительно меньше

LEVI, L.I.; SOSNENKO, M.N.

More on technical terminology in founding. Lit. proizv. no. 5:45-
48 My '61. (MIRA 14:5)

(Founding—Terminology)

LEVI, L. I.

Nitrogen solubility and content in cast iron. Lit. proizv.
no.10:32-35 0 '62. (MIRA 15:10)

(Cast iron) (Nitrogen)

LEVI, L.I.

Effect of melting conditions on the gas-content of cast iron.
Lit. proizv. no. 11:19-24 N 162. (MIRA 15:12)
(Iron founding) (Gases in metals)

LEVI, L.I.

One of the main reasons for the "heredity" properties of
foundry pig iron. Lit.proisv. no.7:27-29 J1 '62. (MIRA 16:2)
(Iron founding)

LEVI, L.I.

Foundry equipment at the 1962 Leipzig Spring Fair. Lit.
proisv. no.1:44-48 Ja '63. (MIRA 16:3)
(Leipzig--Exhibitions)
(Foundries--Equipment and supplies)

L 16797-63

EWP(k)/EWP(q)/EWT(m)/BDS

AFFTC/ASD

PF-4

JD

ACCESSION NR: AP3005799

S/0128/63/000/008/0043/0047

112
67

AUTHOR: Levi, L. I.; Get'man, A. A.; Vlasova, T. M.

TITLE: Gases in cast metal [Reports presented at an all-Union conference on problems of interaction of gases with metals and alloys, held in February 1963]

SOURCE: Liteynoye proizvodstvo, no. 8, 1963, 43-47

TOPIC TAGS: steel melting, vacuum steel melting, electroslag melting, electromagnetic stirring, vacuum degassing, manganese steel, chromium alloy, aluminum alloy, steel casting, titanium casting, hydrogen behavior, nitrogen behavior, nitrogen effect, porosity, inert gas effect, salt effect, filtration

ABSTRACT: An all-Union conference on problems of interaction of gases with metals and alloys was held in February 1963. About 60 reports were presented and discussed at the conference, attended by 300 representatives of 150 scientific organizations of the USSR. N. M. Chuyko, Yu. P. Galitskiy, V. B. Rutkovskiy, A. P. Perevyazko, E. S. Señchilov, and E. D. Samoylenko reported on the behavior of

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L 16797-63

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ACCESSION NR: AP3005799

hydrogen and nitrogen in acid and basic electric furnaces, and K. N. Ivanov, on melting steel with low hydrogen content in arc furnaces. V. P. Karasev and P. Ya. Ageyev discussed behavior of gases during the treatment of metal with solid sorbents such as slags and emphasized that they markedly reduce the hydrogen content. M. F. Galkin, Yu. A. Yevstratov, M. M. Zakharov, and A. V. Kuzin spoke of the elimination of underskin porosity in austenitic steel castings by addition of magnesite shortly before tapping, tapping at 1700-1730C, and addition of titanium in the ladle. Yu. A. Klyachko and I. V. Tulepova discussed the effect of vacuum-arc melting and electroslag melting on the gas content in steel and pointed out that both methods reduce the hydrogen and oxygen content, promote the dispersion of nonmetallic inclusions, and change their chemical composition. N. M. Chuyko, A. T. Perevyazko, V. B. Rutkovskiy, R. Ye. Danichek, and Yu. V. Lagunov dealt in their report with vacuum degassing of steel. The best results were obtained in vacuum stream degassing and by blowing a stream of an inert gas through metal in a ladle in vacuum. The report of A. I. Pakhomov and A. N. Sokolov discussed

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L 16797-63

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ACCESSION NR: AP3005799

the effect of electromagnetic stirring on gas content. Yu. A. Nekhendzi, N. G. Girshovich, K. P. Lebedev, and I. V. Cruznykh analyzed the effect of gases on the shrinkage of alloys. V. I. Vlasov and Ye. F. Komolova discussed the effect of nitrogen on properties of manganese steel and pointed out that nitrogen in high-manganese steel increases wear resistance and strength. The report of V. G. Korotkov analyzed the combined effect of salts, inert gases, vacuum, and filtration on aluminum alloys. G. F. Balandin, E. Ch. Gini, Yu. P. Matveyko, Ye. A. Sokolov, Yu. A. Stepanov, and Yu. P. Yakovlev discussed gas-induced defects in large thin-walled castings. E. Ya. Kukkonen, G. A. Kaplunovskiy, A. A. Demidova, O. N. Magnitskiy, and B. B. Gulyayev reported on porosity formation in titanium castings. Fused magnesite molds vacuum fired at high temperature, use of pressure in casting, and centrifugal casting all reduce the gas porosity in titanium castings.

27

ASSOCIATION: none

Card 3/13

LEVI, L.I.; POZDNEV, V.D.; POZDNEV, Yu.D.

Improved methods of studying the fusion of sand on castings.
Lit. proizv. no. 7:44-45 J1 '63. (MIRA 17:1)

LEVI, L.I.; CHERNIN, E.A.; DEGAL'TSEV, A.I.

Apparatus for determining the dynamic properties of immersion thermo-
couple. Izv. lab. 29 no.12:1502-1503 '63. (MIRA 17:1)

LEVI, L.I., doktor tekhn. nauk; KUNIN, L.L., kand. khim. nauk,
retsenzent; CHERNYAK, O.V., inzh., red.; UVAROVA, A.F.,
tekhn. red.; DEMKINA, N.F., tekhn. red.

[Nitrogen in cast iron for castings] Azot v chugune dlia
otlivok. Moskva, Izd-vo "Mashinostroenie," 1964. 229 p.
(MIRA 17:4)

LEVI, L.I.; BADER, E.I.; SIROTIN, A.Ya.

Content of gases in malleable cast iron. Izv. vys. ucheb. zav.;
zhern. met. 7 no.7:210-214 '64 (MIRA 17:8)

1. Moskovskiy institut stali i splavov.

LEVI, L.I.; BADER, E.I.; KORNEYEV, D.M.

Temperature range of the appearance of brittleness in malleable
iron castings. Izv. vys. ucheb. zav.; Chern. met. 7 no.9:
167-171 '64. (MIRA 17:6)

1. Moskovskiy institut stali i splavov.

LEVI, L.I.; BADER, E.I.

Nature of brittleness of black core malleable cast iron.
Lit. proizv. no.11:31-33 N '64. (MIRA 18:8)

LEVI, L.I., doktor tekhn. nauk; BADER, E.I., inzh.

Engineering properties and use of malleable cast iron in the
manufacture of machinery. Vest. mashinostr. 44 no.8:58-61
Ag '64. (MIRA 17:9)

LEV2, L.I.

Third "Foundry Days" of Hungary. lit. proizv. no.11:44-45
N 164. (MIRA 18:8)

LEVI, L.I.; PATTIKHAL, Pratap Sh.

Effect of nitrogen on the formation of a chill layer and a transition zone in gray cast iron. Izv. vys. ucheb. zav.; chern. met. 8 no.5:168-172 '65. (MIRA 18:5)

1. Moskovskiy institut stali i splavov.

LEVI, L.I., doktor tekhn. nauk; BADER, E.I., kand. tekhn. nauk

Effect of oxygen treatment on the graphitization and
properties of malleable cast iron. Lit. proizv. no.11:
31-32 N '65. (MIRA 18:12)

L 04817-67

ACC NR: AP6025816

(A,N)

SOURCE CODE: UR/0128/66/000/005/0037/0038

AUTHOR: Levi, L. I. (Doctor of technical sciences); Knizhnik, G. S. (Engineer); Maslan, L. M. (Engineer)

38
35
B

ORG: none

TITLE: Effect of ultrasonic vibrations on the structure and properties of the aluminum alloy AL4

27

SOURCE: Liteynoye proizvodstvo, no. 5, 1966, 37-38

TOPIC TAGS: degasifier, aluminum alloy, ultrasonic effect, molten metal / AL4 aluminum alloy, UZD-200 M degasifier, EM-3 electron microscope

ABSTRACT: To determine the effect of ultrasonic treatment, one part of a melt of AL4 aluminum alloy (9.44% Si, 0.24% Mg, 0.28% Fe, 0.36% Mn, 0.049% Ti, with Al as the reminder) was refined with MnCl₂ and the other part treated with ultrasound by means of an UZD-200M degasifier at 740°C (twice for 6 min each time, with vibration amplitude of 16-18 μ and frequency of 18.5 kilo-cps, with an interval of 5 min). The melt was then checked for gas content by means of the vacuum test (Stepanov, B. N., Maslan, L. B. Trudy NITI, vyp. 8, ch. 1, 1964) and solidified specimens were subjected to mechanical tests and metallographic exami-

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L 04817-67

ACC NR: AP6025816

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nation of the fine structure with the aid of an EM-3 electron microscope. For comparison, the portion treated with $MnCl_2$ was subjected to similar tests. Findings: microphotographs of the $MnCl_2$ -treated specimen reveal distinct inclusions of Si in the $Si-Al$ eutectic. Ultrasound-treated specimens display finer-sized and somewhat spheroidized Si inclusions; this undoubtedly affects the mechanical properties of the alloy. The macrostructure of the ultrasound-treated specimens is also much more disperse than that of the untreated or $MnCl_2$ - treated specimens. An analysis of replicas also confirms the dispersing effect of the ultrasound on the structure of the alloy. Ultrasonic treatment contributes to the appearance of the surface of particles of fresh melt-filled fissures, cracks and cavernosities, which improves their cohesion with the base metal. The "sonic wind" forming during ultrasonic treatment of the melt, as well as the mixing of the melt in the furnace due heat fluxes, contribute to a more uniform distribution of the dispersed and wetted particles throughout the metal. In the process of the crystallization of the melt these particles serve as additional crystallization nuclei which, in their turn, contribute to a more finegrained structure of the alloy. This may account for the marked increase in mechanical properties of the alloy (σ_B increases from 27.0 to 29.5 kg/mm^2 and δ increases from 3.0 to 8.6%). Thus, the effect of ultrasonic vibrations on the molten alloy may be regarded as a complex process involving the dispersion of inclusions and their uniform distribution throughout the metal, as well as the wetting of dispersed particles in the ultrasonic field and the formation of additional crystallization nuclei. All these factors

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L 04817-67

ACC NR: AP6025816

indisputably contribute to an improvement in sthe structure of the metal and in the quality of the finished ingots or castings. Orig. art. has: 2 Figures

SUB CODE: //, 20 / SUBM DATE: none / ORIG REF : 003

Card

3/3 *gl*

SOSNENKO, Mikhail Nikolayevich, kand. tekhn.nauk; LEVI, L.I.,
nauchn. red.; KONCHA, F.F., red.

[Composition of the charge in founding; Sostavlenie
shikhty v liteinom proizvodstve. Moskva, Vysshaya
shkola, 1964. 279 p. (MIRA 18:3)

LEVI, M.: GEORGIEV, A.

Oxidation of 4-ethylpyridine with nitric acid. *Farnatsiia*, Sofia
5 no.3:27-31 My-Je '55.

(PYRIDINES,

4-ethylpyridine, oxidation with nitric acid)

(NITRATES,

nitric acid, oxidation of 4-ethylpyridine)

Country : Bulgaria G-2
Category :
Abs. Jour : 45042
Author : Levi, M. and Georgiev, A.
Institut. : Bulgarian Institute for Pharmacology
Title : The Oxidation of 4-Ethylpyridine by Nitric Acid

Orig. Pub. : Trudy Nauch Isledovatel Inst Farmatsiya, 1, 45-46
(1957)
Abstract : Isonicotinic acid has been prepared in 75% yields
by the oxidation of γ -ethylpyridine (I) with
 HNO_3 . Best results are obtained when the I is
treated gradually with a mixture of conc HNO_3
and 96% H_2SO_4 in the presence of $HgCl_2 \cdot CuSO_4$ [sic]
as the catalyst at a temperature of from 150-160°
to 200-220°.

D. Vitkovskiy

COUNTRY : BULGARIA H
CATEGORY : Chemical Technology. Chemical Products and
Their Applications. Pharmaceuticals. Vitamins?
ABS. JOUR. : RZKhim., No. 23 1959, No. 83245
AUTHOR : Levi, M.; Georgiev, A.
INST. : -
TITLE : Technological Derivation Method of Hydrazin
Sulfate from Urea

ORIG. PUB. : Tr. N-i. in-t. farmatsiya, 1957, 1, 47-49

ABSTRACT : The reaction of urea with sodium hypochlorite
solution was studied as a function of tempera-
ture conditions and of concentration and pre-
sence of inhibitors. On the basis of the above
study a technological method for derivation
of hydrazin sulfate was developed resulting
in the yield of 45%. This method is superior
to that employed at the chemico-pharmaceutical
factory.

*Antibiotics.

CARD:

1/1

H - 60

LEVI, M.

Problems of cholesterol and the preparation of its outgoing substance. p. 79.

BILTEN DOKUMENTACIJE. TEHNIKA SAOBRAČAJNIH SREDSTAVA. (Društvo hemičara i tehnologa NR Bosne i Hercegovine. GLASNIK) Sarajevo, Yugoslavia. Vol. 7, 1958.

Monthly List of East European Accessions (EEAI) IC Vol. 9, no. 2, Feb. 1960.

Uncl.

BULGARIA / Organic Chemistry. Organic Synthesis.

G-2

Abs Jour: Ref Zhur-Khimiya, No 1, 1959, 1228.

Author : ~~Levi, M.~~
 Inst : Not given.
 Title : The Possible Preparation of Substituted Ethanol
 Amines by the Addition of Mercury Acetate to the
 Corresponding Olefins.

Orig Pub: Farmatsiya (Belg.), 1958, 8, No 1, 31-34:

Abstract: A method is suggested for the preparation of C_6H_5
 $CHOCH(R)NH$ (I) and C_6H_5 $CHOHCH(R)NCH_3$ (II) for
 use as therapeutic agents. The synthesis is con-
 ducted according to the scheme: $C_6H_5CH = CH R$
 (III) $\rightarrow C_6H_5CH(OCH_3)CH(R)HgOCOCH_3$ (IV) $\rightarrow C_6H_5CH-$
 $(OCH_3)CH(R)HgBr \rightarrow C_6H_5CH(OCH_3)CH(R)Br$ (V) \rightarrow
 $\rightarrow C_6H_5CH(OCH_3)CH(R)NH_2$ (VI) \rightarrow I; or V $\rightarrow C_6H_5CHOHCH(R)Br$

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BULGARIA / Organic Chemistry. Organic Synthesis. G-2

Abs Jour: Ref Zhur-Khimiya, No 1, 1959, 1228.

Abstract: (VII) \rightarrow II. From V one also can prepare $C_6H_5CH(OCH_3)CH(R)NHCH_3$ (VIII). The presence of CH_3CO- group in IV, R = COOH (IV-a) indicates the absence of a lactone form. One hundred grams of III, R = COOH, 220 grams of $(CH_3COO)_2Hg$ (IX) and one liter of methanol are boiled for 30 minutes. After 30-40 hours at $-20^\circ C.$, 85% of IV-a separates, m. p. $200-202^\circ C.$ One hundred twenty grams of IV-a in 500 milliliters of chloroform is heated to $55^\circ C.$, in the presence of sunlight 80 grams of bromine and 140 grams of KBr in 40 milliliters of water are added gradually, the excess of bromine is removed by the addition of $NaHSO_3$, the solvent is distilled off from the organic layer, and one obtains V, R = COOH (V-a), yield 80%, m. p. $135-137^\circ C.$

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5

BULGARIA / Organic Chemistry. Organic Synthesis.

G-2

Abs Jour: Ref Zhur-Khimiya, No 1, 1959, 1228.

Abstract: (from benzene-petroleum ether). Thirty-one grams of III, R = H, 96 grams of IX in 100 milliliters of methanol are boiled for 30 minutes. After being set aside for 30 hours \sim 20°C., 50 grams of KBr in 150 milliliters of water is added, the oil which separates is extracted with 100 milliliters of chloroform, washed with water and then brominated as in the preparation of V-a. V is separated in a 73% yield, R = H, (V-b), b. p. 125-127°C./15 millimeters. Analogously from III, R = CH₃, one obtains V, R = CH₃ (V-c), yield 75%, b. p. 114-116°C./17 millimeters, and from III, R = COOC₂H₅, V is synthesized, R = COOC₂H₅ (V-d), yield 96%, b.p. 157-159°C./millimeters. One hundred grams of V-a and 100 milliliters of a 25% NH₄OH solution are heated in an autoclave (95°C., 5 hours) and upon

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BULGARIA / Organic Chemistry. Organic Synthesis. G-2

Abs Jour: Ref Zhur-Khimiya, No 1, 1959, 1228.

Abstract: evaporation, VI is separated in a 73% yield, R = COOH (VI-a), m. p. 229-232°C. (from alcohol). Analogously from V-b and 15% NH₄OH solution one obtains VI, R = H (VI-b), yield 83%, b. p. 110-113°C./20 millimeters, from V-c VI is synthesized, R = CH₃ (VI-c), yield 75%, b. p. 112-114°C./15 millimeters and VI is prepared from V-d, R = COOC₂H₅.HCl, yield 76%, m. p. 180-183°C. Ten grams of VI-a and 90 milliliters of 48% HBr are boiled for 2 hours and evaporated to dryness. To that 30 milliliters of water is added and neutralized with concentrated NH₄OH. Thus I is obtained, R = COOH (I-a), yield 36%, m. p. 190-193°C. Analogously from VI-b one synthesizes I, R = H, yield 40%, b. p. 157-160°C./17 millimeters, and from VI-c one synthesizes I, R = CH₃, yield 26%, m. p. 98-

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^{Levi, M.}
BULGARIA / Organic Chemistry--Synthetic organic chemistry.

G-2

Abs Jour : Ref Zhur - Khimiya, No 14, 1959, No. 49526

Author : Levi, M.; Levi, Sh.

Inst : Bulgarian Institute for Pharmacology

Title : The Oxidation of 4-ethylpyridine by Manganese Dioxide

Orig Pub : Farmatsiya (Bulgaria), 8, No 4, 20-22 (1958)

Abstract : Isonicotinic acid (I) is readily synthesized by the oxidation of 4-ethylpyridine (II) by technical grade MnO_2 and H_2SO_4 under mild conditions: 50 gms II in 0.6 liter 70% H_2SO_4 are gradually treated with 400 gms 60% MnO_2 at 55 - 60°, the solution is stirred for 1 hr, after which it is heated for 1 hr at 85° and for 2 hrs at 100 - 105°; the filtrate is treated with NH_4OH to pH 3.5 and I is separated. The mother liquor is neutralized and the I is precipitated as the complex with $CuSO_4$.

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BULGARIA / Organic Chemistry--Synthetic organic chemistry:

G-2

Abs Jour : Ref Zhur - Khimiya, No 14, 1959, No. 49526

The over-all yield of I is 95%. For the preceding communication see RZhKhim, No 6, 1956, 16082. --
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LEVI, M.

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Sci. Pharmaz., Vol 11, No 4, July-Aug 1961

1. "Seed for Medical Substitution Along with Distribution of Drugs" R. KREMA; pp 3-5.
2. "Comparative Pharmacologic Study of Some Phenothiazines" L. DAVIA (deputy of Pharmacology, Medical Faculty in Sofia / Director Prof. P. ZHELEZOV /); pp 1-11.
3. "Antitubercular Effect of the Isonicotinoyl Hydrasid" S. PETERKOV, Part 4. 5-nitro-2-furfurylidene-isonicotinoyl Hydrasid (Mitsun); A. ZHELEZOV and S. ZELIN (Pharmacy Research Institute, Sofia / Director P. ZHELEZOV /); pp 17-21.
4. "Synthesis of Some Simple Structural Analogs of Papaverine" R. KREMA, M. LEVI (Affiliation as -3); pp 25-29.
5. "Preparation of Synthesis of Pipertazine" M. ZHELEZOV (Affiliation as -1); pp 31-36.
6. "A Method for Obtaining Rutin from Sophora japonica" St. ZHELEZOV (Affiliation as -3); pp 37-40.
7. "Regarding the Attle for Ivory Cream, Ivory Penny, Ivory Inch and Ivory Minute in Pharmaceutical Composites" St. ZHELEZOV; pp 45-47.
8. "Prescription by Paracetamol" V. ZHELEZOV and D. KOPRIVANOV; pp 48-51.

1. Litorea pe farmaceutic pri WC.
 2. Nuzhno-izobrematnoy substituts pe farmaceuty.

LEVI, M.I.; MINKOV, G.B.

Study of the specificity of reactions of passive hemagglutination
in plague. Lab.delo 7 no.9:44-46 S '61. (MIRA 14:10)

1. Astrakhanskaya protivochumnaya stantsiya.
(PLAGUE) (BLOOD-AGGLUTINATION)

LEVI, Mont, dr.

Some details on the participation of health workers in the War of
Liberation in 1941 in the Bosnia Kraina and in eastern parts of Bosnia.
Med. arh. 15 no.6:33-36 N-D '61.

(MILITARY MEDICINE hist)

LEVI, M.

Bulgaria

No degree listed

Scientific Research Chemico-pharmaceutical Institute
(Nauchnoizsledovatel'ski khimiko-farmatsevtichen insti-
tut); Director: L. ZHELYAZKOV.

Sofia, Farmatsiya, No 5, September-October, 1962, pp 20-24.

"Synthesis of Some Simple Analogues of Papaverin"

LEVI, I.; IVANOVA, K.

Preparation of analgin from formylantipyrin. Trud Khim. farm-
tsvozt Inst 4:18-22 '63.

LEVI, M.

Influence of nutrition on the etiology of arteriosclerosis.
Bul se Youg 7 no.6:174 D '62.

1. Medicinski fakultet, Sarajevo.

*

LEVI, Mario

SURNAME (in caps); Given Names

Country: Yugoslavia

Academic Degrees: Magister

Affiliation: Sarajevo

Source: Zagreb, Farmaceutski glasnik, No 7-8, July-August 1961, pp 286-288.

Data: "Some Observations Concerning the Educational System and Teaching
of Pharmacy in Great Britain."