

DOBRIN, B. Yu.

Treatment of acute pneumonia with antibacterial preparations combined with a novocaine block. Vrach. delo no. 287-90 F'64

1. Kommunaraskiy gorodskoy otdel zdavookhraneniya ( zav. - zasluzhennyy vrach UkrSSR A.V. Vinogreyeva) i kafedra gospi-tal'noy terapii ( zav. - prof. R. Ya. Spivak) Luganskogo medi-tsinskogo instituta.

DOBRIN, K.

Red Cross

Members of activist groups exchange their experience. Sov. kras. krest 3, No. 2, 1953.

Monthly List of Russian Accessions, Library of Congress, June 1953. Uncl.

SHCHUKIN, Anatoliy Yefimovich; DOBRIN, K.S., red.; SHCHETININ, V.D.,  
red.; ROMANOVA, N.I., tekhn.red.

[Industry of the German Democratic Republic; its development  
and place in the socialist division of labor] Promyshlennost'  
Germanskoi Demokraticheskoi Respubliki; ee razvitie i mesto v  
sotsialisticheskom razdelenii truda. Moskva, Izd-vo IMO, 1959.  
118 p. (MIRA 13:1)

(Germany, East--Industries)  
(Germany, East--Foreign economic relations)

MUKHIN, Aleksandr Ivanovich, kand.geograf.nauk; DOBRIN, K.S., red.;  
KOROLYUK, L.M., red.; ROMANOVA, N.I., tekhn.red.

[Economic geography of the Federal Republic of Germany] Ekono-  
micheskaja geografiia Federativnoi Respubliki Germanii. Moskva,  
Izd-vo IMO, 1960. 256 p. (MIRA 13:11)  
(Germany, West--Economic geography)

GIRSHOV, L. A. (Leningrad); GEL'MAN, I. V. (Leningrad); DOBRIN, L. A.  
(Leningrad)

Some engineering methods for analyzing control objects with  
monotonous transitive functions. Avtom. i telem. 23 no.9:  
1210-1214 S '62. (MIRA 15:10)

(Automatic control)

GEL'MAN, I. V. (Leningrad); DOBRIN, L. A. (Leningrad)

Approximate analysis of a certain class of linear objects of  
automatic control. Avtom. i telem. 23 no.11:1542-1545 N '62.  
(MIRA 15:10)

(Automatic control)

DOBRIK, L.G.

Eolian sand ground swells, their structure and movement. Izv. AN  
Turk.SSR no.4:37-41 '59. (MIRA 13:8)

1. Institut geologii AN Turkmenskoy SSR.  
(Sand dunes)

DOBRIN, L.G.

Changes in the conditions of sand transport due to strip-type binding of the surface of shifting sand heaps. Izv. AN Turk. SSR. Ser. biol. nauk no.5:72-76 '61. (MIRA 14:12)

1. Institut pochvovedeniya i osvoyeniya peskov AN Turkmenskoy SSR. (AYDIN--SOIL BINDING)



DOBRIN, L. G.

Calculation of the movement of barchans based on data of meteorological stations. Izv. AN Turk, SSSR. Ser, biol, nauk no. 6:64-68 '63. (MIRA 17:5)

1. Institut pustyn' AN Turkmenskoy SSSR.

DOBRIN, L.G.

Formation of sand ridges. Izv. AN Turk. SSR. Ser. biol. nauk no.6:  
25-32 '64. (MIRA 18:4)

1. Institut pustyn' AN Turkmenskoy SSR.

DOBRIN, N.; MOTORNYI, O.

The millionaire. Znan.ta pratsia no.3:23 M- '60.  
(MIRA 13:6)  
(Construction industry--Technological innovations)

DOBRIN, V.B.

~~.....~~  
Expedience of application of alloplastic materials in repair of  
saddle-nose. Vest. otorinolar., Moskva 14 no.6:75 Nov-Dec 1952.  
(GLML 23:4)

1. Candidate Medical Sciences. 2. Gor'kiy.

DOBRIN, V. E.

Radical surgery in congenital anterior cerebral hernia. Vop. neurokhir,  
16, No 1, 1952.

DOBRIN, Vul'f Borisovich.

Academic degree of Doctor of Med Sci, based on his defense,  
7 May 1954, in the Council of the Gor'kiy Med Inst imeni  
Kirov, of his dissertation entitled: "The Use of Plastics in  
Surgery (Clinical-Experimental Research)".

Academic degree and/or title: Doctor of Sciences

SO: Decisions of VAK, list no 8, 2 April 55, Byulleten'  
MVO SSSR, No. 14, July Moscow pp 4-22, Uncl.  
JPRS/NY-429

~~DOBRIN, Yu.G.~~

Management of convalescing patients following amputation. Sovet. med.  
17 no.7:42-44 July 1953. (CIML 25:1)

1. Of the Ukrainian Scientific-Research Institute of Prostheses (Director  
-- A. P. Kotov).

DOBRIN, Yu.G.; SHCHEPKOVSKAYA, Ye.V. (Khar'kov)

Prospects for the use of data on experimental cancer for clinical purposes. Vrach. delo no.12:99-102 D '60. (MIRA 14:1)

1. Laboratoriya immunologii kozhi i sika Ukrainского nauchno-issledovatel'skogo kozhno-venerologicheskogo instituta.  
(CANCER) (PENICILLIN)



DOBRIIN, Z. L.

SOV/113-59-2-11/16

Author: Karliit, A. K.  
Title: External Meeting of the Scientific-Technical Council of the All-Union Institute of Refractories at the Kharovichi Kombinat of Refractories (Vyzvedeniya zadaniy nauchno-tekhnicheskogo soveya Vsesoyuznogo instituta ognestroyeniya na Kharovicheskoe kombinatnoye predpriyatiye)

SYNOPSIS: (Summary) ...  
ABSTRACT: In October 1959 a joint meeting of the VTS Vsesoyuznogo Instituta Ognestroyeniya (VTS) All-Union Institute of Refractories, Technical Council of the Kharovichi Kombinat (Technical Council of the Kharovichi Kombinat) and the Institute took place. It was devoted to the discussion of the prospects of the development of the Kombinat for the years 1959-1965. ...  
ASSOCIATIONS: Vsesoyuznyy Institut Ognestroyeniya (All-Union Institute of Refractories)

BEL'KEVICH, V.I.; SV.DKOVSKAYA, N.F.; BELETSKIY, Ye.L.; DOBRINA, S.K.;  
KLYUCHAREVA, Z.S.

Effect of ultrasonic vibrations on biological microscopic  
preparations. Trudy VNIIMIO no.3:55-61 '63 (MIRA 18:2)

EI 'PINER, I.Ye.; KRIGER, Yu.A.; DOBRINA, S.Z.

Mechanism of the hemolytic effect of ultrasonic waves. Biofizika  
8 no.6:677-680 '63. (MIRA 17:7)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.

DOBRINCHENKO, I.V.

Determination of the isoantigenic compatibility of the blood by means of conglutination under conditions of a district hospital. Med.sestra 21 no.8:47-48 Ag '62. (MIRA 15:9)

1. Iz Khorol'skoy rayonnoy bol'nitsy Poltavskoy oblasti. (BLOOD---TRANSFUSION)

DOBRINCIC, M.

"The Article Railroad Tariffs And Sheep Breeding" p. 268. (Zeleznice, Vol. 9, no. 8, Aug., 1953, Beograd.)

SO: Monthly List of East European Accessions, Library of Congress, Vol. 2, No. 9, September 1953, Uncl.

DOBRINCIC, V.

Forest service and the payment of administrative and legal taxes. p.345.  
SUMARSKI LIST. Zagreb. Vol. 79, no. 9/10, Sept./Oct. 1955.

SOURCE: East European Accessions List (EEAL), Library of Congress  
Vol. 5, No. 6, June 1956

DOBRINESCU, I.; APOLZAN, S.

Technological design of air coolers and condensers for the oil industry. Bul Inst Petrol Rum no. 10:107-124 '63.

L 33084-66

ACC NR: AP6024592

SOURCE CODE: RU/0007/65/016/008/0461/0464

AUTHOR: Dobrinescu, D. (Engineer); Pirvulescu, C. (Engineer)

1-2  
B

ORG: none

TITLE: Rapid method for calculating heat losses to the ambient medium in oil industry installations

SOURCE: Petrol si gaze, v. 16, no. 8, 1965, 461-464

TOPIC TAGS: heat loss, pipeline, petroleum industry equipment, heat convection, radiative heat transfer, thermodynamic calculation

ABSTRACT: The authors describe a rapid method for the calculation of heat losses to the surroundings by free convection and radiation from equipment and pipelines. The method involves the use of nomographs constructed by the authors to determine the heat exchange coefficients for free convection and radiation in terms of the average temperature of the item and the surroundings, the difference between the two temperatures, the characteristic length and the emission coefficient for the surface of the heat-losing body. Two numerical examples are given to illustrate the use of the nomograms. Orig. art. has: 3 figures and 8 formulas. [Based on authors' Eng. abst.] [JPRS: 33,544]

SUB CODE: 20 / SUBM DATE: none / ORIG REF: 004 / OTH REF: 004

Card 1/2 *lo*

UDC: 655.5.012.34.001.2(083.57);536.2/3



DOBRINESCY, D., ing.; APOLZAN, S., ing.

Technological design of coolers and air condensers in the oil industry. Energetica Rum 11 no.12: 621-628 D'63.

DOBRINESCU, D., ing.; APOLZAN, S., ing.

Contributions to the study regarding the cooling of liquid oil products by direct contact with water. Petrol si gaze 15 no. 4: 199-204 Ap '64.

L 49209-65

ACCESSION NO. 1234567

REF ID: A66094

AUTHOR: [Faint text]

TITLE: Method of calculating the air excess and mixture ratio... supplied by electronic analyzers

SOURCE: Konstruktsiya Mashin, no. 5, 1961, 223-27

TOPIC: engineering, air breathing apparatus

Abstract: Abstract. English summary modified.

... by using the data obtained by electro-  
nic analyzers from the exhaust gases, and present some nomo-  
grams for the reading of the required values.

ASSIGNMENT: none

SUBJECT: none

ENCLOSURE

NUMBER: none

STATUS: none

Card 1/1

DOBRINESCU, D., ing., lect. univ.

Possibilities of recovering the heat from combustion gases evacuated from the technological installations of the oil refineries. Energetica Rum 13 no.3:94-100 Mr '65.

1. Chair of Thermotechnics and Thermal Machines of the Petroleum, Gas, and Geology Institute, Bucharest. Submitted April 22, 1964.

DOBRINETSKIY, S.I.

Mineralogy of heavy fractions in rocks of the Polesye complex.

Min.sbor. 18 no.3:356-360 '64.

(MIRA 18:8)

1. Gosudarstvennyy universitet imeni Ivana Franko, L'vov.

DOBRINOV, Georgi

16 JUL 1951

(H) (S)

- 1. "Soviet, Redden Meditained Property, No 2, 1952 National, For a Dialectic Attack on Intellectuals", pp 3-9.
- 2. "Physical Therapy in the Treatment of the Commonest Skin Diseases," V. KAVKOY, Chief (Zvezdostan) of the Physical Therapy Section (Petrovskoyevskaya Kamenka) of the Scientific Institute of the Ministry of Health (Zvezdostan) in Moscow, and V. KAVKOY, Section Chief (Zvezdostan Kamenka) at the Petrovskoyevskaya Kamenka (Petrovskaya Kamenka), 1951, pp 10-19.
- 3. "Concerning the Role of the Young in a Case of Tubular Neoplasia," Yu. YAKOVLEV, Candidate in Medical Sciences at the Higher Medical Institute (VIZM), Vlad raditioned Institute, in Petrovsk; pp 19-24.
- 4. "Sanitary-Hygiene Requirements in the Production and Maintenance of Lead Batteries," N. KAVKOY, Chief of Labor Hygiene (Zvezdostan Kamenka) at Petrovsk, and V. KAVKOY, Chief of Labor Hygiene (Zvezdostan Kamenka) at Petrovsk, in Petrovsk; pp 24-32.
- 5. "Concerning the Home Treatment of Children," B. ZAKHAROV of MIP (not identified); pp 33-36.
- 6. "Our Experience with the Home Treatment of Children," P. STOKOV, nurse (meditsinskaya sestry) in the Children's Division (Detstvo otdeleniye) of the First City Hospital (Gorodskaya bolitsya) in Petrovsk; pp 37-39.
- 7. "Hygiene in Workers' Offices," Georgi Dobrinov, President (prezident) of the Petrovskaya Kamenka (Petrovskaya Kamenka) in Petrovsk; pp 41-44.

DOBRINOV, I.

"Forest management placed on correct genetic foundations."

p.30322(Gorsko Stopanstvo. Vol. 13, no. 7, Sept. 1957, Sofia, Bulgaria)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 2,  
February 1958

KAMBEROVA, M., inzh.; IANEV, V., inzh.; ENEV, K., inzh.; DOBRINOV, V., inzh.;  
MINKOV, M., inzh.; NIKOLOV, A., inzh.

Extracting silicon from the Martin cast iron in the ladles with cinder.  
Min delo 16 no.11:27-30 '61.

1. Metallurgichen zavod "Lenin" (for Nikolov)

(Castiron) (Silicon)



The image shows a microfiche card with a grid of data fields. The top header contains the following text:  
1st AND 2nd DEGREE      PROCESSES AND PROPERTIES INDEX      3rd AND 4th DEGREE

Handwritten annotations on the card include:  

- "Bc" in the upper left corner.
- "a 3" in the upper right corner.
- A large, dark, illegible stamp in the center, possibly reading "A. A. DORRIS" and mentioning "INSTITUTION".

At the bottom of the card, there is a classification section:  
ASB-5LA METALLURGICAL LITERATURE CLASSIFICATION

The bottom edge of the card features a series of punch holes and a row of alphanumeric characters: **A B C D E F G H I J K L M N O P Q R S T U V W X Y Z 0 1 2 3 4 5 6 7 8 9**

127 AND 128 CODES      129 AND 130 CODES

PROCESSES AND PROPERTIES INDEX

*bc*      *C-4*

COMMON ELEMENTS

COMMON VARIABLES INDEX

ASB-ELA - METALLURGICAL LITERATURE CLASSIFICATION

FROM STEINZAVN      FROM SOMIAY

GROUPS	GROUPS	GROUPS	GROUPS
A	B	C	D
E	F	G	H
I	J	K	L
M	N	O	P
Q	R	S	T
U	V	W	X
Y	Z	AA	AB
AC	AD	AE	AF
AG	AH	AI	AJ
AK	AL	AM	AN
AO	AP	AQ	AR
AS	AT	AU	AV
AW	AX	AY	AZ
BA	BB	BC	BD
BE	BF	BG	BH
BI	BJ	BK	BL
BM	BN	BO	BP
BQ	BR	BS	BT
BU	BV	BW	BX
BY	BZ	CA	CB
CC	CD	CE	CF
CG	CH	CI	CJ
CK	CL	CM	CN
CO	CP	CQ	CR
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CW	CX	CY	CZ
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DI	DJ	DK	DL
DM	DN	DO	DP
DQ	DR	DS	DT
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DY	DZ	EA	EB
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EG	EH	EI	EJ
EK	EL	EM	EN
EO	EP	EQ	ER
ES	ET	EU	EV
EW	EX	EY	EZ
FA	FB	FC	FD
FE	FF	FG	FH
FI	FJ	FK	FL
FM	FN	FO	FP
FQ	FR	FS	FT
FU	FV	FW	FX
FY	FZ	GA	GB
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GG	GH	GI	GJ
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GO	GP	GQ	GR
GS	GT	GU	GV
GW	GX	GY	GZ
HA	HB	HC	HD
HE	HF	HG	HH
HI	HJ	HK	HL
HM	HN	HO	HP
HQ	HR	HS	HT
HU	HV	HW	HX
HY	HZ	IA	IB
IC	ID	IE	IF
IG	IH	II	IJ
IK	IL	IM	IN
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JM	JN	JO	JP
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JY	JZ	KA	KB
KC	KD	KE	KF
KG	KH	KI	KJ
KK	KL	KM	KN
KO	KP	KQ	KR
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KW	KX	KY	KZ
LA	LB	LC	LD
LE	LF	LG	LH
LI	LJ	LK	LL
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LQ	LR	LS	LT
LU	LV	LW	LX
LY	LZ	MA	MB
MC	MD	ME	MF
MG	MH	MI	MJ
MK	ML	MM	MN
MO	MP	MQ	MR
MS	MT	MU	MV
MW	MX	MY	MZ
NA	NB	NC	ND
NE	NF	NG	NH
NI	NJ	NK	NL
NM	NN	NO	NP
NQ	NR	NS	NT
NU	NV	NW	NX
NY	NZ	OA	OB
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OG	OH	OI	OJ
OK	OL	OM	ON
OO	OP	OQ	OR
OS	OT	OU	OV
OW	OX	OY	OZ
PA	PB	PC	PD
PE	PF	PG	PH
PI	PJ	PK	PL
PM	PN	PO	PP
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PU	PV	PW	PX
PY	PZ	QA	QB
QC	QD	QE	QF
QG	QH	QI	QJ
QK	QL	QM	QN
QO	QP	QQ	QR
QS	QT	QU	QV
QW	QX	QY	QZ
RA	RB	RC	RD
RE	RF	RG	RH
RI	RJ	RK	RL
RM	RN	RO	RP
RQ	RR	RS	RT
RU	RV	RW	RX
RY	RZ	SA	SB
SC	SD	SE	SF
SG	SH	SI	SJ
SK	SL	SM	SN
SO	SP	SQ	SR
SS	ST	SU	SV
SW	SX	SY	SZ
TA	TB	TC	TD
TE	TF	TG	TH
TI	TJ	TK	TL
TM	TN	TO	TP
TQ	TR	TS	TT
TU	TV	TW	TX
TY	TZ	UA	UB
UC	UD	UE	UF
UG	UH	UI	UJ
UK	UL	UM	UN
UO	UP	UQ	UR
US	UT	UU	UV
UW	UX	UY	UZ
VA	VB	VC	VD
VE	VF	VG	VH
VI	VJ	VK	VL
VM	VN	VO	VP
VQ	VR	VS	VT
VU	VV	VW	VX
VY	VZ	WA	WB
WC	WD	WE	WF
WG	WH	WI	WJ
WK	WL	WM	WN
WO	WP	WQ	WR
WS	WT	WU	WV
WW	WX	WY	WZ
XA	XB	XC	XD
XE	XF	XG	XH
XI	XJ	XK	XL
XM	XN	XO	XP
XQ	XR	XS	XT
XU	XV	XW	XX
XY	XZ	YA	YB
YC	YD	YE	YF
YG	YH	YI	YJ
YK	YL	YM	YN
YO	YP	YQ	YR
YS	YT	YU	YV
YW	YX	YY	YZ
ZA	ZB	ZC	ZD
ZE	ZF	ZG	ZH
ZI	ZJ	ZK	ZL
ZM	ZN	ZO	ZP
ZQ	ZR	ZS	ZT
ZU	ZV	ZW	ZX
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PROCESSES AND PROPERTIES INDEX

A-1

Bc

Polarographic method in organic chemistry.  
 I. Electroreduction of peroxides. A. A. DOMIN-  
 SRAJA and M. B. NEUMANN (Acta Physicochim.  
 U.R.S.S., 1939, 10, 297-308).—The polarographic  
 method has been applied to the determination of  
 H<sub>2</sub>O<sub>2</sub>, MeO<sub>2</sub>H, and (EtO)<sub>2</sub>. The method is capable  
 of detecting 2.5 × 10<sup>-7</sup> g. of H<sub>2</sub>O<sub>2</sub>, 10<sup>-7</sup>—10<sup>-8</sup> g. of  
 MeO<sub>2</sub>H, and 10<sup>-7</sup> g. of (EtO)<sub>2</sub> per ml. and is particularly  
 applicable to the determination of peroxides in com-  
 posite condensates obtained during the cool-flame  
 oxidation of hydrocarbons. C. R. H.

*Leningrad Inst. Chem. Phys.*

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

SEARCHED	SERIALIZED	INDEXED	FILED
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1ST AND 2ND ORDERS      PROCESSES AND PROPERTIES INDEX      1ST AND 2ND ORDERS

CA

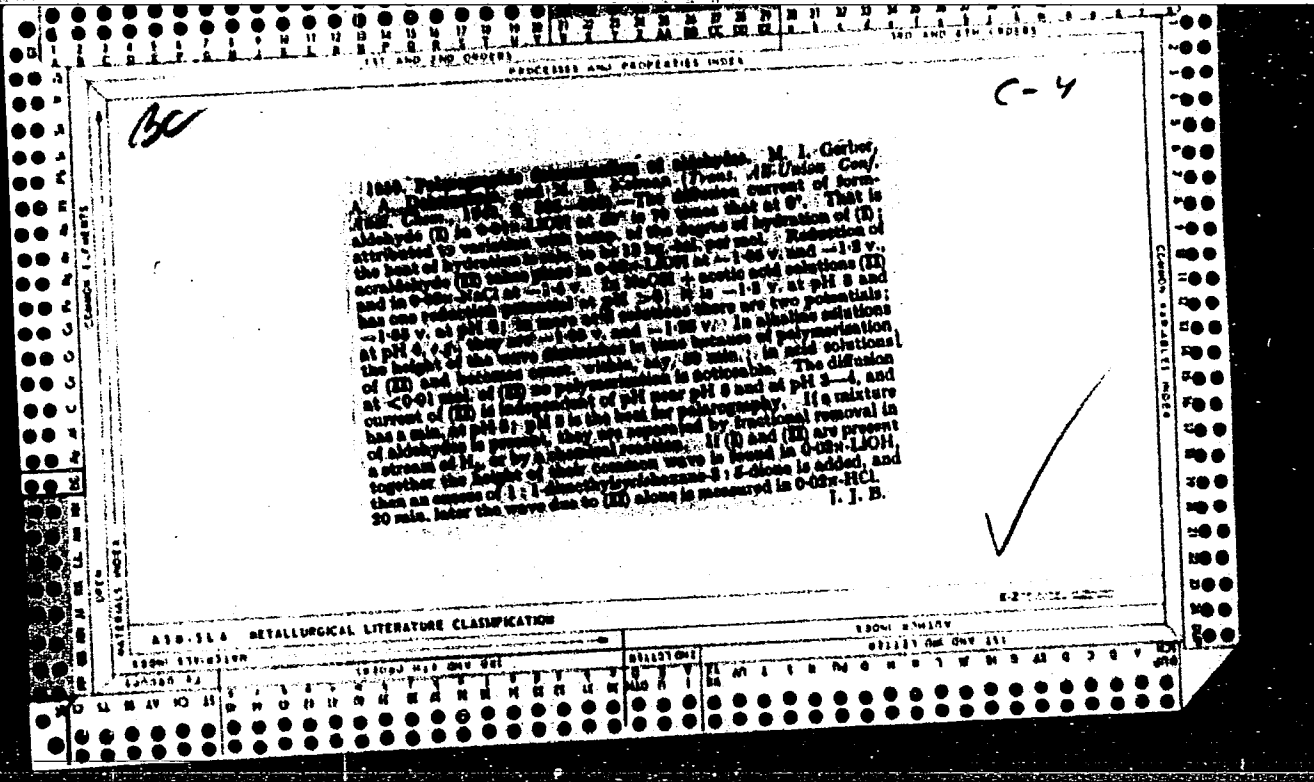
The polarographic method in organic chemistry. II. Correction for losses of volatile substances removed by the flow of inert gases through the electrolyte. V. I. Ginyubkin, A. A. Dobrinskaya and M. B. Neiman. *Acta Physicochim. U.S.S.R.* 3: 11; 701-20(1939)(in English); cf. C. A. 33, 8198<sup>g</sup>.—By use of Raoult's law, equations are developed for calcg. the loss of volatile substances along with the inert gases used to drive out the O from the solns. to be analyzed. The removal of volatile substance from the 1st cell is given by  $x_1 = x_1^0 e^{-kA}$  and its accumulation in the 2nd cell by  $x_2 = kx_1^0 A^2 / (1 - e^{-kA})$ , where  $k = Ap_{00}T_0/1244 rT$  ( $r = \text{vol. of soln. in cell 1, } A = \text{vol. of inert gas passed per min., } P_0 \text{ is the vapor pressure of the substance used and } \alpha \text{ is a factor for deviation from ideal solns., i. e., from Raoult's law). For Et}_2\text{O, the exptl. value is } \alpha = 120, \text{ whereas from the miscibility-nonmiscibility curves for H}_2\text{O-Et}_2\text{O, the calcd. value is } \alpha = 135. \text{ For AcH } \alpha = 1 \text{ at } 25^\circ. \text{ The values of } k \times 10^4 \text{ at } 0 \text{ and } 25^\circ \text{ were, resp., for CH}_2\text{O, 0; AcH, 1.83, 10; EtCHO, 3.4, —; n-PrCHO, 4.15, 23. The use of inert gases such as H for the removal of one of the components of a binary or ternary mixt. to be subjected to polarographic analysis is suggested.}$

F. H. Rathmann /

A.S.B.-S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

E-Z

E-Z



PROCESS AND PROPERTIES INDEX

7

The spectrographic determination of potassium in solutions. A. A. Ishchinskaya and I. M. Gurevich (Zhukovskiy State Univ., Zhukovskiy Lab 12, MIO 101047) Place an aliquot of a soln. contg. less than 0.14 mg. K<sub>2</sub>SO<sub>4</sub> in a cavity in a Cu electrode and burn 30 sec. at 8 amp. with a Bventitsky low-voltage a.-c. arc. Log (K 4047.2/Cu 4022), plotted against log % K, gave a straight line between 0.0 and 1.1% K. Na and Pb did not interfere.

The probable error for 80 detns. on a single soln. was 3.9%.  
Cyrus Feldman

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

ASB-51A	ASB-51B	ASB-51C	ASB-51D	ASB-51E	ASB-51F	ASB-51G	ASB-51H	ASB-51I	ASB-51J	ASB-51K	ASB-51L	ASB-51M	ASB-51N	ASB-51O	ASB-51P	ASB-51Q	ASB-51R	ASB-51S	ASB-51T	ASB-51U	ASB-51V	ASB-51W	ASB-51X	ASB-51Y	ASB-51Z
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209. Mechanism of oxidation of nicotine in gaseous phase. Yokoyama, A.A. and Ni-  
man, B.H. (Doklady Akad. Nauk U.S.S.R., vol. 56, (9), 1969-1972). 1967.

immediate source clipping

PA 55/49117

DOBRINSKAYA, A. A.

USSR/Chemistry - Furfural

Dec 48

"Absorption Spectrum of Furfural in Acid and Alkali Solutions," A. A. Dobrinskaya, M. B. Neyman, L. N. Polkanova, R. V. Protsenko, Inst of Chem, Gor'kiy State U, 3 3/4 pp

"Dok Ak Nauk SSSR" Vol LXIII, No 5

Study of the absorption spectrum of furfural, one of the most interesting representatives of aldehydes because of its bond system, confirmed previously advanced theory of the equilibrium of alpha and beta forms in solutions of unsaturated aldehydes and ketones. Submitted by Acad N. N. Semenov 12 Oct 48.

55/49T17



DOBRIKSKAYA, A.A.

PA 157T70

USSR/Metals - Wolfram Alloys  
Steeloscope

Dec 49

"Sorting of "Pobedites" With the Aid of a Steel-  
oscope," A. A. Dobrinskaya, Ye. P. Telyaninova,  
Gor'kiy State U, 2 pp

"Zavod Lab" Vol XV, No 12

Describes briefly method for determining grade  
of "pobedites" -- Wolfram base alloys -- in re-  
gard to contents of titanium, cobalt, nickel  
and molybdenum using autocollimation steeloscope  
with AC arc (5A, 110V). Copper rod used as

157T70

USSR/Metals - Wolfram Alloys  
(Contd)

Dec 49

permanent electrode. Check analyses conducted  
in laboratories of Chem Inst and of several  
plants proved dependability of method.

157T70

3

CA

Absorption spectra of aldehydes and ketones with conjugated bond systems C:CC:O in acid and alkaline solutions. A. A. Dobrinakaya and M. B. Neiman. *Izvest. Akad. Nauk S.S.S.R., Ser. Fiz.* 14, 820-4(1950).—Absorption measurements in the ultraviolet were made on alk. solns. of acrolein, furfural, and isatin conng. AcOH or NaOH. The appearance of addnl. absorption max. in alk. soln. confirms the previously (cf. C.A. 43, 2816a) described appearance of  $\alpha$ -forms in acid and  $\beta$ -forms in alk. solns.  
S. Pakawer

DOBRINSKAYA, A. A.

PA 169T10

USSR/Chemistry - Analysis, Gases

Aug 50

"Apparatus for Microanalysis of Gases," A. A. Dobrinskaya, M. B. Neyman, Ye. A. Andreyev, Inst of Phys Chem, Acad Sci USSR

"Zavod Lab" Vol XVI, No 8, pp 934-938

Describes improved construction of apparatus for microanalysis of gases. Demonstrates possibility of using this apparatus for kinetic investigations and analysis of gases dissolved in metals. Error in determination of separate components of gas mixture does not exceed 1%.

169T10

ДОБИНСКАЯ, А. А.

PA 19/T12

USSR/Chemistry - Combustion

Oct 51

"Investigation of the Ignition of Gaseous Mixtures. XXI. Investigation of Kinetics of Low-Temperature Oxidation of Butane," A. A. Dobinskaya, M. B. Neyman

"Zhur Fiz Khim" Vol XXV, No 10, pp 1169-1180

Developed methods for polarographic determination of intermediate products formed during induction period of low-temp combustion of hydrocarbons. Investigation of chem processes occurring during induction period of low-temp combustion of butane revealed accumulation of peroxides and higher

194/T12

USSR/Chemistry - Combustion (Contd)

Oct 51

aldehydes according to certain laws. Proposes mechanism of chain oxidation of hydrocarbons as formation in turn of alkyl, then peroxide, then aldehyde radicals.

194/T12

DOB RINSKAYA (A. A.)

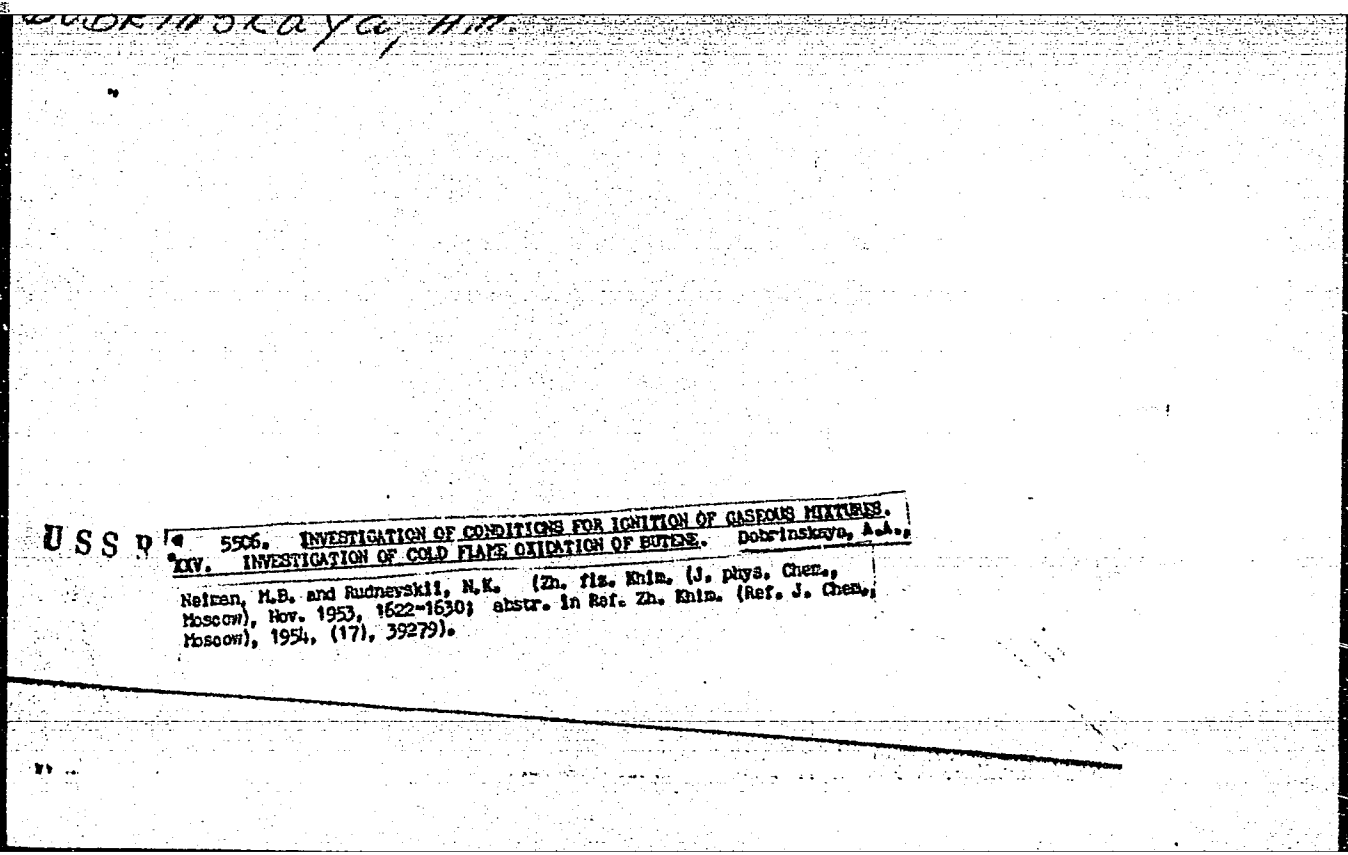
U S S R .

Thermochemical investigations of solutions. V. Pressure and composition of vapors of binary systems of acetaldehyde and water. A. A. Dobrinskaya, V. G. Markovitch, and M. B. Neiman (~~Inst. Chem. Phys. Acad. Sci. U.S.S.R., Leningrad~~). *Izv. Akad. Nauk S.S.S.R. Div. Chem. Sci.* 1953, 434-41; *Bull. Acad. Sci. U.S.S.R. Div. Chem. Sci.* 1953, 391-6; cf. *U.S.A.* 44, 9211a. The vapor pressures of pure and of anhydrous solns. of AcH were detd. by the static method, over the temp. range 20-40°C. for solns. contg. from 10 to 90% of AcH. The compos. of the vapors were detd. by a dynamic method. The vapor-pressure curve of AcH is given by  $\log p = 7.821 - \frac{6600}{T} - 2.3RT$ . The vapor pressures of the solns., as shown in 5 figs. and 6 tables, are very close to those calcd. by the Dührum-Margules method, and obey the equation  $d \ln p / dT = 1 / RT^2$ . The exptl. values of the heats of vaporization  $l$  for various concns. of solns. are, resp., 10.10, 10.20, 10.30, 10.40, 10.50, 10.60, 10.70, 10.80, 10.90, 11.00 cal./mol. Values for the heats of diln.  $Q_1$  and  $Q_2$  are also given.

F. H. R.

*A. B. ...*

174



USSR 5506. INVESTIGATION OF CONDITIONS FOR IGNITION OF GASEOUS MIXTURES.  
XIV. INVESTIGATION OF COLD FLAME OXIDATION OF BUTENE. Dobrinskaya, A.A.,  
Nelken, M.B. and Rudnevskii, N.K. (Zh. fis. Khim. (J. phys. Chem.,  
Moscow), Nov. 1953, 1622-1630; abstr. in Ref. Zh. Khim. (Ref. J. Chem.,  
Moscow), 1954, (17), 39279).

ДОБРИНСКАЯ, А. А.

USSR/Chemistry - Kinetics of  
Combustion

Jul/Aug 53

"Investigation of the Conditions That Produce Ignition of Gas Mixtures. XXII. Effects of Admixed Ethyl Peroxide (I) and Acetaldehyde (II) on the Kinetics of Cold-Flame Oxidation of Butane," A. A. Dobrinskaya, M. B. Neyman, Inst of Chem Phys, Acad Sci USSR

Iz Ak Nauk SSSR Otkn, No 4, pp 623-628

Demonstrated that admixture of I to a butane-oxygen mixt shortens the period of induction of a cold flame. With I added, org peroxides and aldehydes

27017

are formed during the induction period. Showed that added II shortens the induction period of a cold butane flame. With II added, organic peroxides are formed. These peroxides are reduced at -0.25 V and -0.6V. Admixture of peroxides and aldehydes in a quantity x shortens the induction period U according to the law.  $lg x = b - k$

27017



DOBRINSKAYA, A.A.

USSR/Chemistry - Combustion Kinetics

Dec 53

"Investigation of the Conditions of Ignition of Gas Mixtures. Comm 26. The Effect of Methylamine (I) on the Cold-Flame Oxidation of Butane (II) and Butene-2 (III)," A. A. Dobrinskaya, M. B. Neyman, N. K. Rudnevskiy, "Inst Chem Physics, Acad Sci USSR

Zhur Fiz Khim, Vol 27, No 12, pp 1784-91

Investigated the effect of I on the cold-flame oxidation of II and III. Derived the mathematical relationship according to which the period of induction of the cold-flame oxidation of II and III

275T11

is increased by addition of I. Found that admixt of I reduces the rate of accumulation of peroxides during induction and brings about formation of considerable quantities of  $\text{CH}_2\text{O}$ .

103

*DOBRENSKAYA, A. A.*

USSR /Chemical Technology. Chemical Products  
and Their Application

I-12

Silicates. Glass. Ceramics. Binders.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 31627

Author : Dobrinskaya A.A.

Title : Use of Radioactive Isotopes in the Building  
Industry

Orig Pub: Uspekhi fiz. nauk, 1956, 60, No 2, 327-361

Abstract: A review of the use of radioactive isotopes  
(RI) in the building industry, in the USSR and  
abroad; experimental procedures are described.  
In particular the possibility is pointed out  
of utilizing RI in the study of various building  
materials (EM), namely: to investigate (I)

Card 1/6

USSR /Chemical Technology. Chemical Products  
and Their Application

I-12

Silicates. Glass. Ceramics. Binders.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 31627

diffusion of different substances into cement;  
determine stability at points of contact of  
specific BM with other BM, for example by I  
of processes at the partition surface between  
cement and reinforcement; I the reactions at  
partition surface between refractories and  
slag or melt; determine the dependence of por-  
osity of cement stone on the number of cycles  
of tests for frost-resistance; determine the  
reaction velocity of  $\text{CaO} \cdot \text{SiO}_2$  formation at  
 $1200-1300^\circ$ ; I the kinetics of hydration of ce-  
ment clinker; determine depth of impregnation

Card 2/6

USSR /Chemical Technology. Chemical Products  
and Their Application

I-12

Silicates. Glass. Ceramics. Binders.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 31627

of wood with antiseptics (possible by the use of radiography method); determine moisture content extent of density and water-permeability of concrete and of its resistance to corrosive action; determine moisture content of concrete mix during the process of its preparation; determine rate of water filtration through concrete; conduct chemical analyses of different substances, in particular to determine the boron content of glass and cement; determine solubility of difficultly soluble substances, etc. In studying the operation of building mechanisms it is possible to determine the extent of wear of parts subjected

Card 3/6

USSR /Chemical Technology. Chemical Products  
and Their Application

I-12

Silicates. Glass. Ceramics. Binders.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 31627

to friction, determine optimal conditions of operation of engines and mechanisms, and also select lubricating oils and fuels. On investigating performance of metallic structures it is possible to study the process of metal corrosion, determine thickness of protective coatings and inspect the quality of welded seams. In erection of various constructions it is possible to determine the humidity and density of the ground, and in building hydraulic works, determine velocity of water flow, study turbulent flow of water, determine direction and rate of

Card 4/6

USSR /Chemical Technology. Chemical Products  
and Their Application

I-12

Silicates. Glass. Ceramics. Binders.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 31627

filtration of water through the ground, determine the soil content of water-soil slurry flowing through pipes; determine silt concentration at the bottom of rivers and lakes; I the effect of the configuration of the shore and of inflow and outflow of water on distribution of the velocity of water motion at different depth levels and in different directions; I distribution of water currents in settling reservoirs; determine front contour of flowing liquid (without taking of samples). Also is pointed out the effectiveness of the use of RI in determination

Card 5/6

USSR /Chemical Technology. Chemical Products  
and Their Application

I-12

Silicates. Glass. Ceramics. Binders.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 31627

of air exchange factor of ventilation systems  
and the detection of leaks in gas pipes and  
heating systems.

Card 6/6

DOBRINSKAYA, L.A.

Study of coregonid fishes of the Ob' River during the period of  
anodromous migration. Trudy Sal. stats. UFAN SSSR no.1:32-57  
'59.

(MIRA 14:9)

(Ob' River--Whitefishes)  
(Fishes--Migration)



DOBRINSKAYA, L.A.

Some observations on the whitefish *Coregonus sardinella* Val. in the southern part of the Ob'Bay in the winter of 1956-1957.

Trudy Sal. stats. UFAN SSSR no.1:74-80 '59. (MIRA 14:9)  
(Ob' Bay--Whitefishes)

DOBRINSKAYA, L.A.

Age changes in the relative weight of internal fish organs. Zool.  
zhur. 44 no.1:72-80 '65. (MIRA 18:4)

1. Institut biologii Ural'skogo filiala AN SSSR, Sverdlovsk.

DOBRINSKAYA, L.A.

Individual variability of internal characters of some fish  
species of the Ob' basin. Trudy Inst. biol. UFAN SSSR no. 38:183-  
187 '65. (MIRA 18:12)

DOBRINSKAYA, Mariya Aronovna; PAVLOVICH, Natal'ya Andronikovna; PANYUKOV,  
A.N., red.; CHUNAYEVA, Z.V., tekhn. red.

[Manual of biochemistry for medical schools] Uchebnik biologicheskoj khimii dlia meditsinskikh uchilishch. Izd.2., dop. i perer.  
Leningrad, Medgiz, 1961. 230 p. (MIRA 14:12)  
(BIOCHEMISTRY)

*DOB RINSKAYA M.A.*

LUR'YE, N.G.; DOBRINSKAYA, M.A.; ABBAKUMOVA-ZEPALOVA, O.N.

Some metabolic changes in tissues of rats caused by malnutrition.  
Vop.med.khim. 4:112-128 '52. (MIRA 11:4)  
(MALNUTRITION) (METABOLISM)

DOBRINSKAYA, M.A.; PAVLOVICH, N.A.

[Textbook of biological chemistry; for medical schools] Uchebnik  
biologicheskoi khimii; dlia meditsinskikh uchilishch. [Leningrad]  
Medgiz, 1957. 175 p. (MIRA 11:5)  
(BIOCHEMISTRY)

DOBRIKSKAYA, M. A.

DOBRIKSKAYA, M. A., ZAKHAROVA, A. V., ROMANCHUK, L. A., RUBINA, KH. M.,  
and GEFIER, YU. M. (USSR)

"The Changes in Tissue Metabolism during Hypoxia and Therapeutic  
Effects."

Report presented at the 5th International Biochemistry Congress,  
Moscow, 10-16 Aug 1961

DOBRINSKAYA, M.A.; RUBINA, Kh.M.

Study of lactate dehydrogenase activity in the tissues and blood of rats under normal conditions and in hypoxia. Vop. med. Khim. 9 no. 3:279-282 My-Je '63. (MIRA 17:9)

1. Kafedra biokhimii I Leningradskogo mēni Pavlova.



DITRIKH, K.F.; DOBRINSKAYA, R.V., red.

[Tuned amplifiers; lectures] Rezonansnye usiliteli; lek-  
tsii. Leningrad, Leningr. in-t aviatsionnogo priboro-  
stroeniia, 1963. 75 p. (MIRA 17:7)

BUTENIN, N.V.; DOBRINSKAYA, R.V., red.

[Motion of a material point in the earth's central force field; dynamics of a body of variable mass; lectures]  
Dvizhenie material'noi tochki v tsentral'nom silovom pole Zemli; dinamika tela peremennoi massy; lektsii. Leningrad, Leningr. in-t aviatsionnogo priborostroenia, 1964. 45 p. (MIRA 17:11)

DOBRINSKIY, A. A.

USSR/Chemistry - Combustion Kinetics Nov 53

"Investigation of Conditions of Ignition of Gas Mixtures. XXV. Investigation of the Cold-Flame Oxidation of Butene (I)", A. A. Dobrinskiy, M. B. Neyman, N. K. Rudnevskiy, Inst Chem Phys, Acad Sci USSR

Zhur Fiz Khim, Vol 27, No 11, pp 1622-1630

Investigated the kinetics of cold-flame oxidation of I. Detd the extent of the cold flame in this oxidation. Derived the math relationship acc to which the period of induction of the cold flame of I is reduced with increased temp and pressure, and

274T18

showed that during the period of induction, accumulation of peroxides, said higher aldehydes, and croton aldehyde (II) takes place acc to an exponential law. Proved that in the slow oxidation of I, O2 is added not only at the double bond (with formation of CH3CHO), but also at the terminal carbon (with formation of II).

ACC NR: AR7000608 (AN) SOURCE CODE: UR/0417/66/000/010/0097/0098

AUTHOR: Dobrinskiy, A. A.

TITLE: Comparative toxicological characteristics of low concentration of cyclohexanone and cyclohexanol as atmospheric pollutants

SOURCE: Ref. zh. Farmakol, khimioterapevt sredst. toksikol, Abs. 10.54.689

REF SOURCE: Nauchn. tr. Omskiy med. in-t, no. 61, 1965, 147-157

TOPIC TAGS: toxicology, air pollution, cholinesterase electroencephalography, human sense, rat

ABSTRACT: The olfactory threshold, electroencephalographic changes concurrent with the functional stress, and the establishment of electrocortical conditioned reflex were studied in humans exposed to inhalation of cyclohexanone (I) and cyclohexanol (II). Male rats were exposed for 87 days to II (0.46 and 0.042 mg per m<sup>3</sup>) and to I (0.61 and 0.059 mg per m<sup>3</sup>). The II has shown a more pronounced reflex effect than I. In rats the chronaxic ratio of antagonistic muscles has decreased. The cholinesterase activity of the whole blood has increased, the blood serum of SH groups has decreased and the liver sugar has increased. These

Card 1/2

UDC: 615.93/94

ACC NR: AR7000608

changes were more pronounced and set in earlier following the exposure to II. In concentrations below reflex producing threshold for man, I and II were also nontoxic for rats. The author is of the opinion that the maximum permissible single or daily atmospheric doses could be established at 0.06 mg per m<sup>3</sup> and 0.04 mg per m<sup>3</sup> for I and II, respectively. Orig. art. has a bibliography of 27 reference items. V. Podosinovskiy. [Translation of abstract] [AM]

SUB CODE: 06/

Card 2/2

DOBRINSKIY, A.Ya. (Krasnyy Liman)

Two cases of uterus rupture. Kaz. med. zhur. no.3:92-93  
My-Je'63. (MIRA 16:9)

(UTERUS—RUPTURE)

DOBRINSKIY, L.N.

Materials on the interior constitution of birds inhabiting sub-  
Arctic regions. Trudy Sal. stats. UFAN SSSR no.1:293-356 '59.

(MIRA 14:9)

(Yamal--Nenets National Area--Birds--Anatomy)

DOBRINSKIY, L.N.

Data on the northern boundary of the range of some bird species  
in the Yamal-Nenets National Area. Trudy Sal. stats. UFAN SSSR  
no.1:367-384 '59. (MIRA 14:9)  
(Yamal-Nenets National Area--Birds)



SHVARTS, S.S., prof. (Sverdlovsk); DOBRINSKIY, L.N., kand. biolog.  
nauk (Sverdlovsk)

Residents of Bennet Island; "Arctic as seen through the eyes  
of a zoologist." Reviewed by S.S. Shvarts, L.N. Dobrinski.  
Priroda 54 no.3:125 Mr '65. (MIRA 18:4)

DCBRINSKIY, L.N.

Ornithofauna of the Sob' Valley. Trudy Inst. biol. UFAN SSSR  
no.38:153-165 '65.

Notes on the birds of the Khadyta Valley (southern Yamal Peninsula).  
Ibid.:167-177 (MIRA 18:12)

SHVARTS, S.S.; DOBRINSKIY, L.N.; TOPORKOVA, L.Ya.

Dynamic nature of morphophysiological characteristics of animals.  
Biol.MOIP.Otd.biol. 70 no.5:5-15 S-0 '65.

(MIRA 18:12)

SHVARTS, S.S., prof.; DOBRINSKIY, L.N., kand.biolog.nauk

Animal world of Khadytayakha. Priroda 55 no.1:71-75 Ja '66.  
(MIRA 19:1)

1. Institut biologii Ural'skego filiala AN SSSR, Sverdlovsk.

DOBRINSKIY, N. S.

DOBRINSKIY, N. S. - "The Basis of Calculating and Designing Press Pump Lines without Accumulators." Min Heavy Machine Building USSR. Central Sci Res Inst of Technology and Machine Building (TsNITMash). Moscow, 1955. (Dissertation for the Degree of Candidate in Technical Sciences).

So; Knizhnaya Letopis' No 3, 1956

*DOB RINSKIY, N.S.*

122-5-16/35

AUTHORS: Zimin, A.I. (Professor) and Dobrinskiy, N.S. (Cand. Tech. Sc.)

TITLE: The Problems of Designing a Pump Transmission without Accumulator for Hydraulic Presses (Voprosy rascheta bezakkumulyatornogo nasosnogo privoda gidravlicheskih pressov)

PERIODICAL: Vestnik Mashinostroyeniya, 1957, Nr 5, pp. 37-42 (USSR)

ABSTRACT: A plot of the force against the displacement of the ram is shown in its typical form and used to discuss several hydraulic factors in a transmission without accumulator. A large proportion of the power is absorbed by throttling. Without accumulator the installed pump power is not fully utilised. Two superimposed pumps give a better utilisation. Various means of improvement are enumerated designed to approximate the ideal pump characteristics. Five types of force/stroke diagram are distinguished represented by the processes of reducing and piercing, upsetting and drawing-out, hot die stamping and briquetting, rubber die pressing and blanking. They differ by the rate of force variation and the pump utilisation factor. These distinctions are illustrated by the results of tests carried out by TsNIITMASH and summarised in a table. Typical losses of a 25 ton press are stated. Eccentric plunger type of pumps are discussed

122-5-16/35

The Problems of Designing a Pump Transmission without Accumulator  
for Hydraulic Presses.

and compared with rotating plunger pumps. Further develop-  
ments are envisaged with emphasis on the separation of the  
transmission into small specialised units. The considerat-  
ions in the selection of pumps are stated and a numerical  
example worked out.

There are 7 figures and 2 tables.

AVAILABLE: Library of Congress.

Card 2/2

SOV/122-58-5-3/26

**AUTHORS:** Zimin, A.I., Professor and Dobrinskiy, N.S., Candidate of Technical Sciences

**TITLE:** Elastic Deformation in Hydraulic-press Systems (Uprugaya deformatsiya v sistemakh gidravlicheskih pressov)

**PERIODICAL:** Vestnik Mashinostroyeniya, 1958, Nr 5, pp 19 - 23 (USSR)

**ABSTRACT:** The energy stored in the hydraulic system of a heavy press is computed by analyzing separately the contributions of the change of volume due to the elastic deformation of its several elements, and the compressibility of the fluid. In a worked-out numerical example, the compressibility accounts for 2/3 of the total. In some practical instances, the stored energy is of the same order as the useful work. A criterion of adequate stiffness is the ratio of the useful work (expended on the plastic deformation of the workpiece) to the energy stored in the hydraulic and mechanical systems. Different press operations such as hot pressing, briquetting, straightening, rubber press work and blanking are considered with special emphasis on presses with a short working stroke. Production processes have different specific pressures exerted

Card1/2



Elastic Deformation in Hydraulic-press Systems

SOV/122-58-5-3/26

on the worked material ranging from 2 - 40 kg/mm<sup>2</sup>. The hydraulic pressure should be as near as possible to the working pressure. The use of accumulators is the more important the lower the stiffness of the press system. There are 6 figures.

Card 2/2 . 1. Hydraulic presses--Analysis

SOV/122-59-6-21/27

AUTHORS: Dobrinskiy, N.S. and Prozorov, L.V.

TITLE: Modern Trends in the Development of Forging Presses

PERIODICAL: Vestnik mashinostroyeniya, 1959, Nr 6, pp 73-80 (USSR)

ABSTRACT: Typical machine loading of forging presses includes 75% of drawing out and finishing operations. Easy control and automatic reciprocation of repeated strokes in finishing is essential. Even servo-control manual operation continuously repeated at the rate of 60-100 operations per minute is fatiguing to the operator. Attention has been given to an automatic quick withdrawal after reaching the required size. The reduced contact time between the cold ram and the hot metal is of special value in forging alloy steels. The speeding up of auxiliary operations (tool replacement and workpiece manipulation) is now being attempted. The layout of presses with the ram cylinders and tanks above the press makes high shop ceilings essential and precludes the use of overhead cranes. Novel layouts eliminate these limitations. Concerning the press power system, the current trend outside Russia favours pump and

Card1/3

SOV/122-59-6-21/27

Modern Trends in the Development of Forging Presses

accumulator systems or direct-pump systems, the latter in presses up to 2 000 tons. The view that direct-pump transmissions require excessive installed power is disputed. The power required in a 2 000-ton press for the operations of upsetting, drawing out and finishing is considered in conjunction with a three-cylinder design. The speed during the working stroke in upsetting would be 50 mm/sec and in drawing out 100 mm/sec. It is found that installed electric motor power can be half the hydraulic power owing to the short pump operation. The required power is found to be 7<sup>40</sup> HP, against 1 170 HP required in a pump-accumulator system, in accordance with existing standards. Variations in the cross-beam speed are achieved by installing groups of many pumps (up to 20). The normal pressure used is 320 kg/cm<sup>2</sup>, obtained in eccentric piston pumps operating at 1 400 rpm. The pumps are housed alongside the press for maximum protection from dust. Presses with underfloor cylinders of foreign origin are mentioned (Lake Erie). Pump-accumulator systems are used above 3 000-ton capacity with 3-cylinder designs.

Card2/3

SOV/122-59-6-21/27

Modern Trends in the Development of Forging Presses

Powerful presses used for die-stamping as well as forging are made with two stages of fluid pressure, e.g. 200 and 320 kg/cm<sup>2</sup>. Hydraulic multipliers are also used in large presses (German "Sack" Press of 11 000 tons capacity has 12 amplification stages). Control systems based on distributor cam-shafts are discussed. The manipulation of the tool and the forging can be performed by wheeled manipulators of up to 5-ton capacity. The layout of several heavy presses of Non-Russian origin is discussed with illustrations. A detailed description of a "Lake Erie" 2 000-ton press is given. There are 8 figures and 7 references, 3 of which are Soviet, 3 English and 1 German.

Card 3/3

SOV/122-59-3-15/42

**AUTHOR:** Dobrinskiy, N.S., Candidate of Technical Sciences

**TITLE:** Crosshead Speed of Hydraulic Presses with Pump-Accumulator Feed Systems (O skorosti rabocheho khoda gidravlicheskih pressov s nasosno-akkumulyatornym privodom)

**PERIODICAL:** Vestnik Mashinostroyeniya, 1959, <sup>79</sup>Nr 3, pp 48-52 (USSR)

**ABSTRACT:** The schematic diagram of a pump accumulator system in Fig 1 is typical and indicates the notation used. The author deduces (2) for the working pressure,  $p_p$  in the main cylinder and Eq (11) for the crosshead speed under the assumption of a linear change in resistance to motion of the crosshead by the blank being forged. Neglecting inertia terms, the crosshead speed  $U_\phi$  is given by Eq (12). With a constant resistance to crosshead motion, the crosshead speed  $U$  is given by Eq (15). Taking  $U_{max}$  when  $R_o/F_p = 0$ , we obtain  $U_{0.5} = 0.7 U_{max}$  when  $R_o/F_p = 0.5 \Delta p_o$ , and  $U_{0.75} = 0.5 U_{max}$  when  $R_o/F_p = 0.75 \Delta p_o$ . Here  $F_p$  is the cross-sectional area of the main cylinder and  $R_o$  is the initial resistance of the blank. When using Eq (15) it is necessary to take into account the drop in pressure in the accumulator at the end of the working stroke. The power  $N$  is given by Eq (18) and is

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SOV/122-59-3-15/42

Crosshead Speed of Hydraulic Presses with Pump-Accumulator Feed Systems

a maximum when the resistance of the blank is about  $\frac{2}{3}$  of the nominal force of the press. A worked example is given for a press dimensioned as Fig 2; equivalent resistance lengths in the main and return cylinder lines are given in Table 1. The resistance and inertial terms are calculated from the corresponding formulae and the speed and time of operation are determined. Further calculations are given for an assumed condition when hot forging where the force/stroke diagram is that shown in Fig 3. The same diagram is used in a discussion on hydraulic shock. A graphical method of finding the increase in pressure due to sudden change in resistance to crosshead motion is shown in Fig 5. An example is worked out (Fig 6). The results are given in Table 2 for different lengths of pipe having different natural periods in relation to speed of shock-wave propagation. With careful design fluid velocities can be arranged to give a shock pressure rise of not more than 20% and this pressure can be utilized to increase the

Card 2/3

Crosshead Speed of Hydraulic Presses with Pump-Accumulator Feed  
Systems

SOV/122-59-3-15/42

operating force of the press when used for stamping or  
coining operations.  
There are 6 figures, 2 tables and 4 Soviet references.

Card 3/3

PHASE I BOOK EXPLOITATION SOV/3955

Moscow. Vysbeye tekhnicheskoye uchilishche

Mashiny i tekhnologiya obrabotki metallov davleniem; sbornik statey (Machinery and Processes for the Pressworking of Metals; Collection of Articles) Moscow, Mashgiz, 1960. 216 p. (Series: It's True, v. 96) Errata slip inserted. 3,500 copies printed.

Ed.: A.I. Zimin, Doctor of Technical Sciences, Professor; Ed. of Publishing House: O.Y. Gofryak; Tech. Ed.: T.P. LFokolova; Managing Ed. for Literature on Heavy Machine Manufacturing (Mashgiz): S.Ye. Golovizin, Engineer.

PURPOSE: This collection of articles is intended for workers in scientific research institutions and in die-forging shops, and for engineering students.

COVERPAGE: The book contains papers from the Department of Machines and Processes for the Pressworking of Metals of the MVTU (Moscow Higher Technical School Iseini N.K. Bauman). The papers deal with theoretical and practical aspects of metal pressworking and with the theory and practice of forging machines and press design. These papers deal with machine hydraulics (selection of dies of screw type "pressure-hammer", which can work as a hydraulic power- or forging press, is presented. Problems of the theory of plastic deformation in forging, upsetting, and forming are also analyzed. 17 reference cards (Nos. 33 to 49) are appended to explain problems pertaining to the content of the articles. These cards are the continuation of cards presented in collection No. 79 of the MVTU, 1957. No particularities are mentioned. References accompany most of the articles.

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D. BRINSKIY, N.S.



ROVINSKIY, Georgiy Nikolayevich; DOBHINSKIY, M.S., inzh., retsenzent;  
ZLOFNIKOV, S.L., inzh., red.; CHERNYAK, O.V., red.izd-va;  
SOKOLOVA, T.F., tekhn.red.; MODEL', B.I., tekhn.red.

[Presses in sheet-metal working plants] Pressovoe oborudovanie  
listoshtampovochnykh tsekhov. Pod red. S.L.Zlotnikova. Moskva,  
Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960. 288 p.  
(MIRA 13:12)

(Sheet-metal work--Equipment and supplies)  
(Power presses)

S/182/60/000/001/005/008  
A161/A029

AUTHORS: Dobrinskiy, N.S.; Kuz'mintsev, V.N.

TITLE: Selection of the Basic Parameters of Hydraulic Forging Presses <sup>14</sup>

PERIODICAL: Kuznechno-shtampovochnoye proizvodstvo, 1960, No. 1, pp. 20 - 23

TEXT: The basic parameters of a hydraulic forging press are the nominal pressure effort P, the maximum travel H of the crossbeam and the maximum space between the table and the crossbeam. In the present USSR practice P, H and S are chosen in accordance with the maximum possible dimensions of ingots to be forged (Ref, 1), and the state standard ГОСТ 7284-54 (GOST 7284-54) requires dimensions and parameters of universal hydraulic four-column forging presses in accordance with this rule. The authors point out that the GOST 7284-54 has become obsolete and must be revised to decrease H and S and increase P, and presses chosen for the maximum ingot size left for a special case only - when there is only one universal press in a shop, or for reducing the ingot height. Facts are listed that led to this conclusion: the general trend to make the shape of ingots as near as possible to the shape of ready forgings, and even replacement of forgings by castings; new foundry methods giving metal with higher mechanical properties

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A161/A029

Selection of the Basic Parameters of Hydraulic Forging Presses

that requires less deformation in forging (smelting and teeming in vacuum, electric heating of lost head on ingots); the "group method" in production of large forgings that is coming into use (all forgings subdivided into classes, and classes into groups by the shape, production technology and suitable equipment and tools); specialization and cooperation of forging production. Production centers already exist for rolling stock axles, turbine wheels, die blocks, slabs, crankshafts, rolling mill rolls. At the UZIM crankshafts are produced on hydraulic presses by a combination method, i.e., forging in initial operations is combined with subsequent stamping of sections (Ref. 3). One other combination example: TsNIITMASH used a 1,300-ton press for stamping a turbine wheel blank by the "section method", whilst a 5,000-ton press is needed for stamping the same wheel in a single press run. The NKMZ uses "underlaid" (podkladnyye) dies (Fig. 2) for forging round or more complex parts; stamping of a disk is shown in (Fig. 3), with a lock in the upper and bottom die parts. Higher die making costs are compensated by economy of high-alloy steel even in production of a small lot of 12 - 15 parts. In "combination" technology large parts can be obtained by forging separate portions and joining them with each other, or with castings and

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A161/A029

Selection of the Basic Parameters of Hydraulic Forging Presses

stampings, by electroslag welding. The NKMZ produced in this way a turbine shaft for the Kuybyshevskaya GES (Kuybyshev Hydro-Power Plant) (Fig. 4). The hollow cylindrical mid-portion and the flanges were cast separately. Metal consumption was cut by 41%, upsetting operation eliminated, and press power required for forging reduced to 3,000 - 3,500 tons from 9,700 tons that would be needed otherwise. Another example were welded gas turbine rotors of austenitic heat-resistant steel (Ref. 4). The old technology would have required a 40-ton ingot and a 25,000-ton press, but welded rotor design (Fig. 5) took a 10-ton ingot and a 10,000-ton press. There are 5 figures and 4 Soviet references. ✓

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8875h  
S/122/60/000/009/008/015  
A161/A026

AUTHOR: Dobrinskiy, N.S., Candidate of Technical Sciences  
TITLE: On the Fluid Flow Dynamics in the Pressure Lines of Hydraulic Presses  
PERIODICAL: Vestnik mashinostroyeniya, 1960, No. 9, pp. 51 - 54

TEXT: It is often necessary to determine the maximum speed of work stroke without detrimental blow effects when selecting the major pressing parameters, and the fluid flow in the pressure line may be used as a basis. It is difficult, however, to define the law of flow under the effect of pipe and water resilience and at the same time the press system cannot be assumed to be rigid. The author suggests an approximate solution of the problem presenting the resilience of the press parts and the fluid in the form of a spring, and calculates the flow dynamics for hydraulic press systems most common in practice, i.e., with a short pipeline between the accumulator and the cylinders, or with hydraulic blow dampers in the case of long pipelines. The work stroke process is presented graphically (Fig. 1). A practical problem is solved: the flow of fluid in the pressure line of a 2,000-ton stamping press at instantaneous load increase and the maximum

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A161/A026

On the Fluid Flow Dynamics in the Pressure Lines of Hydraulic Presses

pressure in the work cylinder when  $p_{p0} = 200 \text{ kg/cm}^2$  (where  $p_{p0}$  is the pressure in the work cylinder corresponding to the equilibrium position of the fluid in the system). The maximum variation amplitude is  $21 \text{ kg/cm}^2$ . The solution is practically acceptable provided that the period of resilient system oscillations considerably exceeds the stroke oscillations period in the pressure line. There are 4 figures and 2 Soviet references.

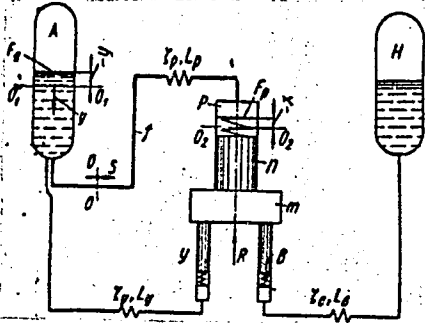


Figure 1: Schematic diagram showing work stroke process. A - accumulator; H - filling tank;  $\pi$  - press; P - work cylinder; Y - balancing cylinder; B - return cylinder; R - resistance force of billet.

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ALTYKIS, A.V.; BEREZHKOVSIIY, D.I.; VOLKOVITSIIY, V.F.; GIRSH, I.I. [deceased];  
GOL'MAN, L.D.; GRANOVSKIY, S.P.; DOBRINSKIY, N.S.; ZIMIN, A.I.; ZLOT-  
NIKOV, S.L.; KAGALOVSKIY, A.I.; LOBACHEV, P.V.; MARTYNOV, V.N.; MOSE-  
NIN, Ye.N.; NAVROTSKIY, G.A.; OKHRIMENKO, Ya.M.; ROVINSKIY, G.N.;  
STOSHA, Ye.A.; ROZHDESTVENSIIY, Yu.L.; TIKHOMIROV, N.V.; UNKSOV, Ye.P.,  
doktor tekhn. nauk, prof.; SHCHEGLOV, V.F.; SHOFMAN, L.A.; SIROTIN, A.I.,  
red. izd-va; MODEL', B.I., tekhn. red.

[Present state of the forging industry] Sovremennoe sostoianie kuznechno-  
shtampovochnogo proizvodstva. By Kollektiv sovetskikh i chekhoslovat-  
skikh avtorov. Moskva, Mashgiz; Prague, SNTL, 1961. 434 p.

(MIRA 14:8)

(Forging)

S/122/61/000/006/005/011  
D244/D301

AUTHOR: Dobrinskiy, N.S., Candidate of Technical Sciences

TITLE: Modern tendencies in the development of domestic hydraulic press construction

PERIODICAL: Vestnik mashinostroyeniya, no. 6, 1961, 42-46

TEXT: The material in this survey is based on the conference in Sverdlovsk, September 20-24, 1960. [Abstractor's note: no additional data given]. More and more powerful stamps, extrusion and forging presses as well as other presses are being developed in the Soviet Union. Progress in this direction is due to research carried out at UZTM, TsNIITMASH and VNIIMETMASH. Further development of this type of machinery depends on a number of factors, the most important of which are (a) the relationship between the advancement of technology and equipment, (b) complex mechanization and automation, (c) drive and control by means of hydraulic mechanisms, (d) provision for assembly of equipment and (e) the problem of strength in press construction. ✓

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Modern tendencies in the...

S/122/61/000/006/005/011  
D244/D301

Multi-stage presses are being widely used for the manufacture of shapes made of wood chips, laminated plastics, and electrically insulating materials. These presses are characterized by the fact that material is held in them under pressure for anything between a few minutes and 1-2 hours. Multi-stage presses are manufactured as complete units, each press having its own auxiliary equipment. The entire production processes are to become fully automatic, states the author.

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DOBRINSKIY, N. S.

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PHASE I BOOK EXPLOITATION

SOV/5799

Unksov, Ye.P., Doctor of Technical Sciences, Professor, Ed.

Sovremennoye sostoyaniye kuznechno-shtampovochnogo proizvodstva (Present State of the Pressworking of Metals) [Moscow] Mashgiz, 1961. 434 p. 5000 copies printed.

Ed. of Publishing House: A.I. Sirotin; Tech. Ed.: B.I. Model'; Managing Ed. for Literature on the Hot Working of Metals: S.Ya. Golovin, Engineer.

Title: Kuznechno-shtampovochnoye proizvodstvo v BSSR (The Pressworking of Metals in the USSR) by: A.V. Altykis, D.I. Berezhkovskiy, V.F. Volkovitskiy, I.I. Girsh (deceased), L.D. Gol'man, S.P. Granovskiy, N.S. Dobrinskiy, A.I. Zimin, S. L. Zlotnikov, A.I. Kagalovskiy, P.V. Lobachev, V.N. Martynov, Ye.N. Moshnin, G.A. Navrotskiy, Ya.M. Okhrimenko, G.N. Rovinskiy, Ye.A. Stosha, Yu.L. Rozhdestvenskiy, N.V. Tikhomirov, Ye.P. Unksov, V.F. Shecheglov, and L.A. Shofman; Eds: Ye.P. Unksov, Doctor of Technical Sciences, Professor, and B.V. Roznov.

Title: Kuznechno-shtampovochnoye proizvodstvo v ChSSR (The Pressworking of Metals in the Czechoslovak SR) by: S. Burda, F. Hrazdil, F. Drastik, F. Zlatohlávek

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Present State of the (Cont.)

SOV/5799

Z. Kejval, V. Krauz, F. Kupka, F. Majer, K. Marvan, J. Novak, J. Odchal,  
K. Paul, B. Sommer, M. Hanz, J. Cástka, V. Šindelár, and J. Šolc; Eds.:  
A. Nejejsa and M. Vlk.

PURPOSE: This book is intended for engineers and scientific personnel concerned with the pressworking of metals.

COVERAGE: Published jointly by Mashgiz and SINTL, the book discusses the present state of the pressworking of metals in the USSR and the Czechoslovak Socialist Republic. Chapters were written by both Soviet and Czechoslovak writers. No personalities are mentioned. There are 129 references: 98 Soviet, 16 English, 8 German, 5 Czech, and 2 French.

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