

MALAKHOV, G.M., prof, doktor tekhn.nauk; ARSENT'YEV, A.I., kand.tekhn.nauk

"Principles of new technology and mechanization of open-pit operations" by N.V.Mel'nikov and others. Reviewed by G.M. Malakhov, A.I.Arsent'ev. Gor.shur. no.8:76 Ag '62. (MIRA 15:8)

1. Krivorozhskiy gornorudnyy institut.
(Kursk Magnetic Anomaly--Strip mining) (Mel'nikov, N.V.)

ARSENT'YEV, A. I., kand. tekhn. nauk; NIKOLAYEV, L. A., gornyy insh.;
PERMYAKOV, R. S., gornyy insh.

Digging a wide trench in an open pit. Gor. zhur. no. 11:75
N '62. (MIRA 15:10)

1. Krivorozhskiy gornorudnyy institut (for Arsent'yev).
2. Olenegorskiy gornobogatitel'nyy kombinat (for Nikolayev, Permyakov).

(Strip mining)

POFOV, Georgiy Nikolayevich; NEKRASOVSKIY, Ya.E., prof., ^{***}retsensent;
TARTAKOVSKIY, B.N., kand. tekhn. nauk, retsensent; ARSENT'YEV,
A.I., dots., retsensent; LAVRINENKO, V.P., dots., retsensent;
KULIKOV, V.V., kand. tekhn. nauk, otv. red.; PARTSEVSKIY, V.N.,
red.isd-va; SHKLYAR, S.Ya., tekhn. red.; MAKSIMOVA, V.V., tekhn.
red.

[Working mineral deposits] Razrabotka mestorozhdenii poleznykh
iskopaemykh. 2., perer. i dop. izd. Moskva, Gosgortekhnizdat,
1963. 588 p. (MIRA 16:7)

(Mining engineering)

U

ALEKSEYEV, F.K.; ANDRIYUTS, G.L.; ARSENT'YEV, A.I.; ASTAP'YEV, Yu.P.;
BEVZ, K.D.; BEREZOVSKIY, A.I.; GENERALOV, G.S.;
DOROSHENKO, V.I.; YESHCHENKO, A.A.; ZAPARA, S.A.; KALINICHENK' V.F.;
KARNAUSHENKO, I.K.; KIKOVKA, Ye.I.; KOBOZEV, V.N.; KUPIN, V.Ye.;
LOTOUS, V.K.; LYAKHOV, N.I.; MALYUTA, D.I.; MSTY, Yu.S.; OVODENKO,
B.K.; OKSANICH, I.F.; PANOV, V.A.; POVZNER, Z.B.; PODORVANOV, A.Z.;
POLISHCHUK, A.K.; POLYAKOV, V.G.; POTAPOV, A.I.; SAVITSKIY, I.I.;
SERBIN, V.I.; SERGEYEV, N.N.; SOVETOV, G.A.; STAIKEVICH, A.A.;
TERESHCHENKO, A.A.; TITOV, D.S.; FEDIN, A.F.; KHOMYAKOV, N.P.;
SHEYKO, V.G.; SHEKUN, O.G.; SESTAKOV, M.M.; SHAN'KO, V.I.

Practice of construction and exploitation of open pits of Krivoy
Rog Basin mining and ore dressing combines. Gor. zhur. no.6:
8-56 Je '63. (MIRA 16:7)
(Krivoy Rog Basin--Strip mining)

ARSENT'YEV, A.I., dotsent; KUROCHKIN, A.N., inzh.

Determination of the line of convergence of mining operations of two independently developed sections of a pit. *Isv. vyy. ucheb. zav.; gor. zhur. 6 no.6:21-25 '63.* (MIRA 16:8)

1. Krivorozhskiy gornorudnyy institut. Rekomendovana kafedroy razrabotki mestorozhdeniy poleznykh iskopayemykh.
(Strip mining)

ARSENT'YEV, A.I., dotsent, kand, tekhn. nauk

Intensity of open pit mining in Krivoy Rog Basin. Sbor. nauch.
trud. KGRi no.15:3-9 '63.
(MIRA 17:8)

KUROCHKIN, A.N., gornyy inzh.; ARSENT'YEV, A.I., dotsent, kand.
tekhn. nauk

Speeding up the development of the '-5m' level of the strip
mine at the Southern Mining and Ore Dressing Combine by
excavating a temporary approach. Sbor. nauch. trud. KGBI
no.15:9-13 '63. (MIRA 17:8)

KUROCHKIN, A.N., gornyy inzh.; ARSLIT'YEV, A.I., doktort, kand. tekhn.
nauk; GUGLIYA, V.L., student; MASTAKOV, G.P., student

Prospects for the third stage of the open pit at the Southern
Mining and Ore Dressing Combine. Sbor. nauch. trud. KGRI no.15:
13-17 '63. (MIRA 1718)

ARSENT'YEV, A.I., dotsent, kand. tekhn. nauk; OVODENKO, B.K., gornyy
inzh.; ETROVKA, Ye. I., gornyy inzh.; MALYUTA, D. I., gornyy inzh.;
NIKOLAYEV, K.P., gornyy inzh.

Speeding up stripping and development of the "4.5m" level of
the strip mine at the Southern Mining and Ore Dressing Combine.
Sbor. nauch. trubl. KGR I no.15:17-22 '63. (MIRA 17:8)

ARSENT'YEV, A.I., kand. tekhn. nauk; BIRMYAKOV, R.S.; BOPKO, I.A.,
student; SANDMIRSKIY, K.Ya., student; SHAPORIN, A.V., student

Expansion of mining operations at the Olenogorsk strip mine
using multiple-row blasting. Sbor. nauch. trud. KORI no.15;
60-63 '63. (MKRA 17:8)

1. Nachal'nik Olenogorskogo kar'yera, Krivorozhskiy basseyn
(for Birmyakov).

ARSENT'YEV, A.I., kand. tekhn. nauk; ASTAF'YEV, Yu.P., kand. tekhn.
nauk; VORONKIN, G.D., gornyy inzh.

Efficiency of strip mining at the Nikolayev Deposit. Sbor.
nauch. trud. KGRI no.15:64-74 '63. (MIRA 17:8)

ARSENT'YEV, A.I., ditser., kand. tekhn. nauk; TATARLIN, A.N., inzh.;
GOLOONOV, N.Ye., inzh.

Using methods of descriptive geometry in the planning of strip
mines. Sbor. nauch. trud. KGBI no.15:113-122 '63.
(MIRA 17:8)

ARSENT'YEV, Aleksandr Ivanovich; VINOGRADOV, Vladimir Samoylovich;
DZYUBENKO, Mikhail Grigor'yevich; YESHCHENKO, Aleksey
Andreyevich; KAL'AKIN, Viktor Vasil'yevich; KARMAZIN,
Vitaliy Ivanovich; KISELEV, Vyacheslav Mikhaylovich;
KULIKOV Vladimir Vasil'yevich; MELESHKIN, Sergey Mikhaylovich;
SINARENKO, Aleksandr Ivanovich; KHVIRENKO, Akin Fotsyevich;
SHKUTA, Eduard Ivanovich; SHOSTAK, Afonasiy Grigor'yevich;
MOSKAL'KOV, Yevguniy Fedorovich, retsenzent; BOSEDOV, Orest
Orestovich, retsenzent; ROSS'IT, Aleksandr Filippovich, otv.
red.; SUROVA, V.A., red.isd-va; LAVRENT'YEVA, L.G., tekhn. red.

[Overall development of an iron-ore basin] Kompleksnoe rasvitiie
zhelezorudnogo bassetina. [By] A.I.Arsent'yev i dr. Moskva, Izd-
vo "Nedra," 1964. 293 p. (MIRA 17:3)

KARNAUSHENKO, I.K., kand.tekhn.nauk; ARSENT'YEV, A.I.; OVODENKO, B.K.

Experience in the rapid deepening of the strip mines at the New
Krivoy Rog Mining and Ore Dressing Combine in opening and developing
the level. Mat. i gornorud. prom. no. 2:73-76 M-Ap '64.
(MIRA 17:9)

МАМАКОВ, Г.М., проф., доктор техн.наук; АРСЕНЬЕВ, А.И., канд.техн.наук;
РАБСТОВ, Г.И., горный инж.

Effect of the length of time spent on mining chambers and the
depth of mining operations on the stability of the ore block
and the hanging wall. Gor. zhur. no.4:27-31 Ap '64. (MIRA 17:4)

1. Krivonozhskiy gosudarstvennyy institut.

MALAKHOV, G.M., prof.; AISENT'YEV, A.I., dotsent; FAUSTOV, G.T., inzh.

Effect of the time factor and depth of work on the parameters of
the chamber mining system in the "Kominern" mine. Izv.vys.ucheb.
sav.; gor.shur. 7 no.2:23-31 '64. (MIRA 17:3)

1. Krivorozhskiy gornorudnyy institut.

ARSENT'YEV, A.I., dotsent; POLISHCHUK, A.K., inzh.; ADIGAMOV, Ya.K., inzh.

Effect of indices of losses and depletion during development
mining deposits at the end boundaries of a strip mine. *Izv.vys.*
ucheb. zav.; gor. zhur. 7 no.3:9-14 '64 (MIRA 17:8)

1. Krivprozhskiy gornorudnyy institut (for Arsent'yev, Polishchuk).
2. Vsesoyuznyy nauchno-issledovatel'skiy gornometallurgicheskoy
institut tsvetnykh metallov (for Adigamov). Rekomendovano kafedroy
razrabotki mestorozhdeniy poleznykh iskopayemykh Krivorozhskogo
gornorudnogo instituta.

ARSENT'YEV, A.I., dotsent; POLISHCHUK, A.K., inzh.

Determining the limits of a strip mine for the selective
mining of several types of ore. Izv.vys.uchev.zav.gor.zhur.
7 no. 4:38-42 '64. (MIRA 17:7)

1. Krivorozhskiy gornorudnyy institut. Rekomendovana kafedroy
razrabotki mestorozhdeniy poleznykh iskopayemykh.

PERMYAKOV, R.I., kand. tekhn. nauk; AKKURATOV, V.N.; ARSENT'YEV, A.I.,
doktor tekhn. nauk

Experience in the building of an open-out mine on the Raivuschorr
Plateau. Gor. zhur. no.10:6-9 0 '65. (MIRA 18:11)

1. Gornokhimicheskiy ordena Lenina kombinat "Apatit" im. S.M.
Kirova (for Permyakov, Akkuratov). 2. Kol'pkiy filial AN SSSR
(for Arsent'yev).

PERMYAKOV, R.S., kand. tekhn. nauk; KULESHOV, A.A., gornyy inzh. nauk;
PAVLENKO, T.I., gornyy inzh.; ARSENT'YEV, A.I., doktor
tekhn. nauk; OVOLENKO, B.K., kand. tekhn. nauk

Use of deep ore cutes in the apatite open-cut mines. Ger.
zhur. no.10:13-16 O '65. (MIRA 18:11)

1. Gornokhimicheskiy ordena Lenina kombinat "Apatit" im. S.M.
Kirova (for Permyakov, Kuleshov, Pavlenko). 2. Kol'skiy filial
AN SSSR (for Arsent'yev, Ovodenko).

ARSENIZEV, A.I., Doktor inzh.nauk. DOV. RUPK. A.I., Dok. tekh. nauk

Interaction between open and underground operations in the
combined mining of deposits. Lav. vys. ucheb. zap., gor. ukus. 8
no. 11 3^o '65. (MIRA 19:1)

1. Kr. vuzovskiy i omonolnyy institut. Rekomendovann kafedroy
razrabotki mestorozhdeniya poleznykh iskopayemykh. Submitted
July 21, 1964.

New Books and Articles on Mining, by A.J. Arsen'yev. (See also No. 2, Dec. 1963).

Lists publications on following: mining, exploitation of ore deposits, mechanization of mining operations, ventilation in mines and slurry transport. Some of the books are: A.A. Alimov and V. Ye. Khain's "Results of and Future Tasks for Determining the Regional Geologic Characteristics of Azerbaydzhan," Bulynnikov's "Gold-bearing Formations and Gold Deposits in the Alay-Sayan Mountain System," and A.J. Arsen'yev's "Gold-bearing Formations of the Northwest Caucasus."

63/491165

~~ARSEN'YEV~~, A. K. nauchnyy sotrudnik; GRCZDOY, B.V., profesor, doktor biologicheskikh nauk, redaktor; PETERSON, A., tekhnicheskiy redaktor

[Nature and natural resources of Bryansk Province; a bibliography]
Priroda i prirodnye bogatstva Bryanskoj oblasti; rekomendatel'nyi ukazatel' literatury. Bryansk, Izd-vo "Brianskii rabochii." Pt.1.
1956. 40 p. [Microfilm] (MLRA 10:7)

1. Bryanskiy oblastnyy muzey (for Arsent'yev)
(Bibliography--Bryansk Province--Natural resources)

SHAROV, Aleksandr Ivanovich; ARSENT'YEV, Fedor Petrovich; VINOGRADOV, G.S.,
inzh., red.; GVIRTZ, V.L., tekhn.red.

[Organising efficient factory transportation] Organizatsia
ritnichnoi raboty vnutrisavodskogo transporta; iz opyta Lenin-
gradskogo metallicheskogo zavoda imeni Stalina. Leningrad, 1956.
13 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy.
Informatsionno-tekhnicheskii listok, no.10. Organizatsia i
ekonomika proizvodstva) (MIRA 10:12)

(Material handling)

ARSENT'YEV, F. V. **Cand Med Sci -- (diss) "Medical value of blood
transfusion in Botkins' disease," Kazan', 1958, 19 pp, 200 cop.
Kazan State Medical Institute) (KL, 45-60, 128)

ARSENT'YEV, F.V., aspirant

A case of familial hepatitis (Botkin's disease). Voen.med.
shir. no.3:75-76 '59. (MIRA 12:6)
(HEPATITIS, INFECTIOUS, case reports
familial (Rus))

ARSENT'YEV, P.V.

Journal of military medicine of the Rumanian People's Republic. Voen.-
med.sbur. no.8:89-92 Ag '59. (MIRA 12:12)
(MILITARY MEDICINE)
(PERIODICALS)

ARSEN'YEV, F.V., kand.med.nauk

Functional state of the kidneys during the treatment of angina
pectoris with antispastic and gangliolytic preparations. Trudy
KGMi no.10:231-234 '63. (MIRA 18:)

1. Iz kafedry hospital'noy terapii (zav. kafedroy prof. I.B.
Shulutko) Kalininskogo gosudarstvennogo meditsinskogo instituta.

ARSENT'YEV, F.V.

Morphology of the liver from data of intravital puncture during the treatment of Botkin's disease with blood transfusions. Kas. med. zhur. no.6:20-21 N-D '61. (MLIA 15:2)

1. Kafedra propedevtiki vnutrennikh bolezney (zav. - prof. A.I. Brening [deceased] Kazanskogo meditsinskogo instituta. Nauchnyy rukovoditel' - prof. K.A. Dryagin.
(HEPATITIS, INFECTIOUS) (BLOOD TRANSFUSION)
(PUNCTURES (MEDICINE))

ARSEN'EV, A. A.

Dependence of the measurement deficiency of solid precipitation on
the wind velocity under conditions of Eastern Siberia. Trudy GGO
no.175:198-199 '65. (MIRA 18:8)

1. Irkutskaya gidrometeorologicheskaya observatoriya.

ARGENTIN, A.R., inzh. tekhn. nauk; BUKHARIN, E.S., inzh. tekhn. nauk;
BONCH-BRUYEVICH, E.A., inzh.; SAGORNIK, G.V., red.

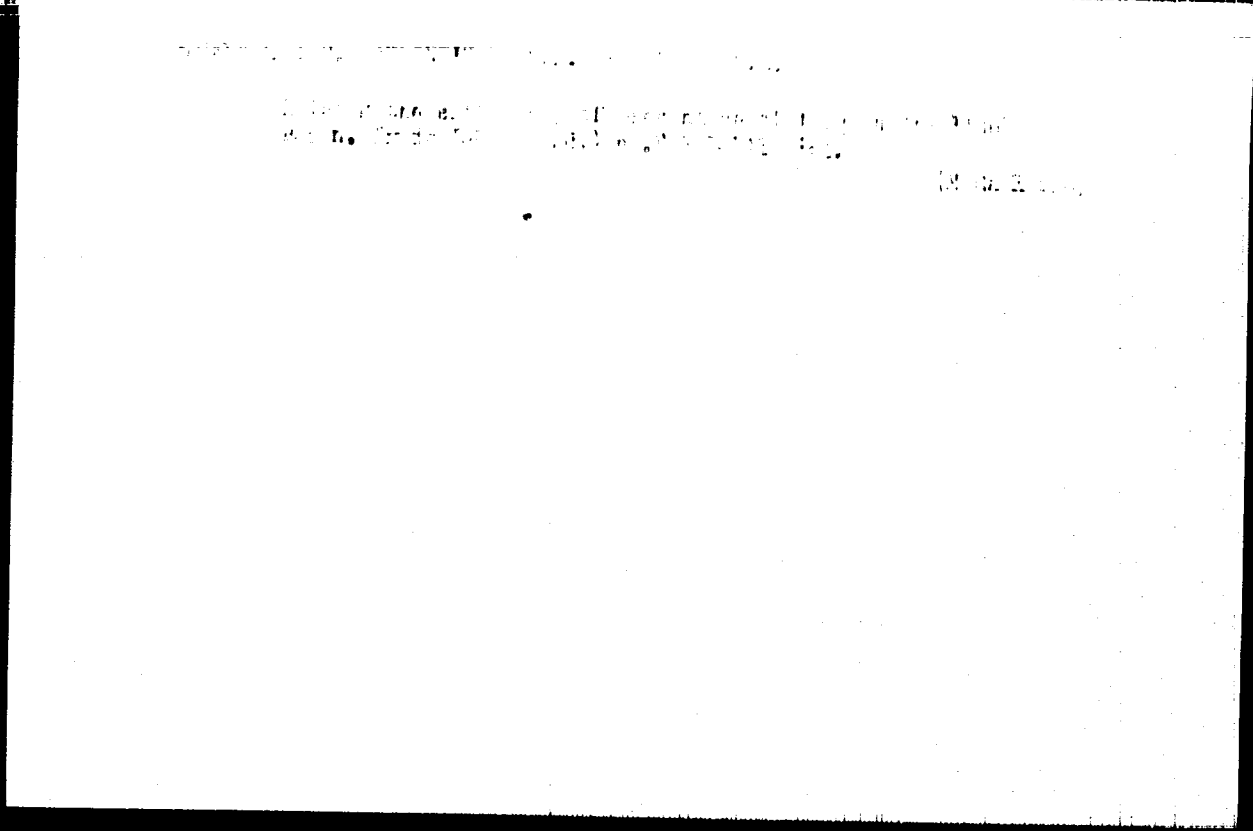
[Pressing of furniture parts from ground wood] Pressovanie
mebel'nykh detalei iz izmel'chennoi drevesiny. Moskva,
TSentr. nauchno-issl. in-t informatsii i tekhniko-ekon. is-
sledovani po lesnoi, tselliulozno-bumazhnoi, derevoobrababa-
tyvausachei promyshl. i lesnomu khoz., 1964. 20 p.

(MIRA 17:11)

1. TSentral'nyy nauchno-issledovatel'skiy institut fanery i
mebeli.

ARSEN'YOV, M. P., kand. tekhn. nauk

Methods for preventing the warping of skins. Dokl. Akad. Nauk SSSR, 1965, no. 2, p. 14.
F 165. (MIRA 18:6)



Dissertation: "Nonmetallic Inclusions in
Cast Iron."

27/6/50

Moscow Inst of Steel Iron I. V. Stalin

SO Vecheryaya Moskva
Sum 71

USSR :

✓
P. Arsenov, Moscow, U.S.S.R., and
theories explain the observed phenomena
are based on the existence of a
the crystal process without supporting
expt. results. Cited literature
and which are a direct result of
the liquid state as a consequence of a

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B. V. STARK

are investigated in the present report by the following:
It is directed to the investigation of the following:
unclassified and confidential information in the
and 80 minutes of the year 1950-1951 and the
with a 0.1-0.2% solution of the following:
They were not prepared with a solution of the following:
through the use of the following:
bars and were covered every 10 minutes by a solution of the following:
it with a 0.1-0.2% solution of the following:
filled with a 0.1-0.2% solution of the following:
with a 0.1-0.2% solution of the following:
washed 3 times with a 0.1-0.2% solution of the following:
each time to stand for 30 minutes in the following:
liquid, heated for 10 minutes with a 0.1-0.2% solution of the following:
extracted with a 0.1-0.2% solution of the following:
suspended in a 0.1-0.2% solution of the following:
filter, the 0.1-0.2% solution of the following:
treated with a 0.1-0.2% solution of the following:
collected in a 0.1-0.2% solution of the following:
hour in 20% of the following:
added, the 0.1-0.2% solution of the following:
F.C., the 0.1-0.2% solution of the following:
reported 4-5 times to completely dissolve the following:

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B. V. STARK

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APPROVED FOR RELEASE: 09/24/2001

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FILIPPOV, S.I., doktor tekhnicheskikh nauk; FILICHKIN, I.F., inzhener;
ARSHUT'IN, R.R., dotsent, kandidat tekhnicheskikh nauk; YAKOVLEV,
V.V., kandidat tekhnicheskikh nauk.

Technological characteristics of bessemer smelting and properties
of soft steel, Sbor. Inst. stali no.35:70-101 '56. (NERA 10:8)

1. Kafedra teorii metallurgicheskikh protsessov.
(Bessemer process) (Steel--Metallography)

PANCHENKO, Yelena Vasil'yevna; SKAKOV, Yuriy Aleksandrovich; POPOV,
Konstantin Viktorovich; KRIMER, Boris Isaakovich; ~~ARSHNIN, K.M.~~
Petr Pavlovich; KHORIN, Yakov Davidovich; LIVSHITS, B.G., doktor
tekh.nauk, prof., red.; GORDON, L.M., red.isdatel'stva;
KARASEV, A.I., tekhn.red.

[Metallographic laboratory] Laboratoriia metallografii. Pod red. ~~?~~
B.G.Livshitsa. Moskva, Gos.nauchno-tekhn.isd-vo lit-ry po chernof
i tsvetnoi metallurgii, 1957. 695 p. (MIRA 10:12)
(Metallography)

"Admixtures, Concentration Ratios and Properties of Iron,"
lecture given at the Fourth Conference on Steelmaking, A.A. Baikov Institute of
Metallurgy, Moscow, July 1 - 6, 1957

ARSENT'YEV, V.V.

137-1958-1-368

, Translation from Referativnyy zhurnal, Metallurgiya, 1958. Nr1. p 57 (USSR)

AUTHORS: Arsent'yev, P.P., Yakovlev, V.V., Filippov, S.I., Filichkin, I.F.

TITLE: Bessemer Process Technology and the Quality of Converter Produced Metal (Tekhnologiya bessemerovakogo protsessa i kachestvo konverternogo metalla)

PERIODICAL: V sb. Fiz.-khim. osnovy proiz-va stali. Moscow. AN SSSR, 1957, pp 21-27, Diskus. pp 160-187

ABSTRACT: Melts in bottom-blown and side-blown converters and in open hearth furnaces have been used to study the effect of [P], [N], and [O] on the properties of Bessemer steel. In comparing the properties of rimmed steel smelted in a side-blown converter and in an open hearth furnace it was established that an increase in [P] from 0.014 to 0.070% results in only a decline in the viscosity of the metal at room temperatures and does not affect its tendency to age. By comparing the properties of steel smelted in side-blown and bottom-blown converters with different amount of pig. and those of rimmed open hearth metal with elevated [P], it was found that an increase from 0.006 to 0.025% of the [N] in the metal induces a decline in the a_k of steel at room temperature. The appearance

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137-1958-1-368

• Bessemer Process Technology (cont)

of a joint effect of [O] and [N] revealed by comparison of the mechanical properties of rimmed and killed Bessemer steel shows that an increase in the content thereof promotes increased susceptibility to aging. while on deoxidation of steel all [O] and [N] are bound into stable compounds and do not call forth any aging tendency

E. T.

- 1. Bessemer converters-Operation
- 2. Open hearth furnaces--Operation
- 3. Steel--Properties--Effects of phosphorus
- 4. Steel--Properties--Effects of nitrogen
- 5. Steel--Properties--Effects of oxygen

Card 2/2

ARSENT'YEV, P.P., kandidat tekhnicheskikh nauk.

Nonmetallic inclusions in cast iron with spheroidal graphite.
Lit.proisv. no.4:23-24 Ap '57. (MLRA 10:5)
(Cast iron--Defects)

NOV/65-58-2-4/46

AUTHORS: Filippov, S. I., Yakovlev, V. V., Arsen'iyev, P. P.

TITLE: The Importance of the Temperature Factor in Converter Processes
(Zracheniye temperaturnogo faktora dlya konvertornykh protsessov)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Metallurgiya, 1958, Nr 2, pp. 24-28 (USSR)

ABSTRACT: The investigation of the converter processes as dependent upon temperature was carried out. When comparing the combustion of carbon in the converter with the temperature applied it may be seen that an intense decarbonization in metals occurs only from 1500°C on. The change of the carbon, silicon and magnesium content in the metals when blowing through the Bessemer converter was investigated according to time and temperature. The comparison of the combustion curves of carbon with those of silicon and magnesium showed that some dependence exists between the beginning of the intense decarbonization and the content of silicon and magnesium. At a temperature of the metallic melt of about 1500°C an intense decarbonization occurs, and at higher temperatures this process becomes even more intense. The

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SOV/153-58-2-4/46

The Importance of the Temperature Factor in Converter Processes

character of the decarbonization does not depend on the concentration of carbon in the melt and is not affected by the interaction between carbon and silicon and magnesium; it most probably only depends on the temperature. The authors assume that at the critical temperature of the iron-carbon melts a change of the properties of the alloys occurs. The comparative investigations of the carbon content and the temperature displayed that it is not the thermodynamics or the concentration ratio of the components but only the oxidation conditions on the occasion of blowing through the converter as well as the temperature factor that determines the decarbonization process of the metallic melt. There are 3 figures and 3 references, 3 of which are Soviet.

ASSOCIATION: Moskovskiy institut stali (Moscow Steel Institute)

SUBMITTED: December 10, 1957

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18(3)

AUTHORS:

Jakovlev, V.S., Philippov, G.I.,
Arsent'yev, P.P., Surovtsev, G.S.

SOV/163-58-4-3/47

TITLE:

Intensification of the Steel Melting Processes Under the Influence of the Jet of the Oxidizing Agent (Intensifikatsiya staleplavil'nykh protsessov pri vozdeystvii struj okislitelya)

PERIODICAL:

Nauchnyye doklady vysshey shkoly. Metallurgiya, 1958, Nr 4, pp 17 - 22 (USSR)

ABSTRACT:

The conditions for a rational air-blast supply into the metal furnace are experimentally investigated by considering, firstly, utilization of the possibilities offered by blast oxidation and, secondly, regulation of both sequence and speeds in the oxidation of the admixtures contained in the metal smelt. In the smelting tests the influence of the main factors named in the following on the order and on the speed of oxidation of the admixtures to pig-iron was examined: 1. Intensity of feeding the bath with oxygen (supplying speed of the oxidizing agent and its composition), 2. method of feeding the oxidizing agent into the bath (refining of molten metal or blasting of the oxidizing agent at the surface). In the course of analyzing primary data a series of relations was

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Intensification of the Steel Melting Processes
Under the Influence of the Jet of the Oxidizing Agent

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obtained, a part of which will be studied here. The data obtained clearly show the effect of temperature on the speed of carbon oxidation in the melt and confirm the supposition, expressed at an earlier date (Ref 2), of the existence of a temperature threshold at decarburization. - At the same time, it is stated that the conditions of feeding the bath with oxygen may somewhat change the influence of the temperature. In the case of weakly oxidizing puddling, the influence exercised by the critical temperature is less marked and increases noticeably with an increase of the oxygen concentration in the fan blast. By intensifying the air blast supply a noticeable increase of the decarburization speed at a mean temperature of the bath of somewhat below 1500° is observed. The testing of a combined supply of the oxidizing agent to the bath while simultaneously blasting and injecting the oxidizing agent into the metal proved to be very interesting. By one jet a 100 % oxygen and by another jet a mixture of 50 % oxygen and 50 % carbon dioxide was injected. The jets lead into the interior and onto the surface of the metal changed place in the 1st and the 3rd melt section. Of the two variants: 1) refining with 100 % oxygen and blasting with a

Card 2/3

Intensification of the Steel Melting Processes
Under the Influence of the Jet of the Oxidizing Agent

307/163-58-4-5/47

mixture of 50 % O_2 + 50 % CO_2 , and 2) refining with 50 % O_2 + 50 % CO_2 , blasting with 100 % oxygen, the latter proved to be more effective. This means that the use of a more intense oxidizing agent for blasting the bath, ensuring higher absolute speeds for the oxidation of the elements, was more effectful. The employment of combined blasting, at both variants, lead to an intensification of the processes of oxidizing the admixtures of molten metal. There are 6 figures and 2 references, 1 of which is Soviet.

ASSOCIATION: Moskovskiy institut stali (Moscow Steel Institute)

SUBMITTED: June 14, 1958

Card 3/3

25(1)

PHASE I BOOK REPRODUCTION

SOV/2804

Filippov, Sergey Ivanovich, Petr Pavlovich Arsent'yev, and Valentin Viktorovich Yakovlev

Konvertornaya plavka stali (Converter Steelmaking) Moscow, Metallurgizdat, 1959. 432 p. 3,000 copies printed.

Ed.: Ye. A. Kazachkov; Ed. of Publishing House: L. V. Yablonskaya;
Tech. Ed.: P.G. Isient'yeva.

PURPOSE: This book is intended for metallurgical engineers, workers in scientific research institutes, and students specializing in steelmaking and the technology of metals.

COVERAGE: The book contains a review of the theoretical principles and practical methods of contemporary steelmaking in Bessemer converters. The thermodynamic and kinetic laws controlling the content of impurities during the melting process are outlined, and contemporary views on the causes of lowered properties of converter steel are discussed. The relation of such properties as impact strength, aging, and weldability to impurities is examined. Methods of im-

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Converter Steelmaking

SOV/2804

proving converter steel, including the use of oxygen blow, vacuum treatment, and certain additives are listed. The authors thank I.F. Filichkin, S.G. Afanas'yev, A.Yu. Pol'yakov, and Ye.A. Kazachkov for their assistance. There are 161 references: 70 Soviet, 45 English, 37 German, 6 French, 2 Swedish, and 1 Polish.

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AVAILABLE: Library of Congress (TN/36.F52)

Card 4/4

GO/bg
1-15-60

KHAN, Boris Khanonovich; DOBROKHOTOV, N.M., akademik, nauchnyy red.;
RAVDIL', P.G., inzh., retsentsent; ARSENT'YEV, P.P., kand. tekhn.
nauk, retsentsent; VENTSKIY, S.I., red. izd-va; DOBROZHINSKAYA,
L.V., tekhn. red.

[Decoxidation, gas removal and alloying of steel] Raskislenie,
degasatsiya i legirovanie stali. Pod red. N.M. Dobrokhotova.
Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi
metallurgii, 1960. 237 p. (MIRA 13:3)

1. AN USCR (for Dobrokhotov).
(Steel—Metallurgy)

VEN' LI-SHI [Wén Li-shih]; ARSENT'YEV, P.P.

Viscosity molten iron with additions of oxygen and carbon.
Izv. vys. ucheb. zav.; Chern. met. 4 no.7:5-11 '61.
(MIRA 14:8)

1. Moskovskiy Institut stali.
(Iron--Analysis)
(Viscosimetry)

ARSENT'YEV, P.P.; FILIPPOV, S.I.

Critical concentrations of arsenic and the possibility of its removal during the refining of iron-carbon melts. Izv. vys. ucheb. zav.; Chern. met. 5 no.5:25-33 '62. (MIRA 15:6)

1. Moskovskiy institut stali,
(Iron-metallurgy)
(Arsenic)

ARSENT'YEV, P.P.; YAKOVLEV, V.V.; FILIPPOV, S.I.

Possibility of arsenic removal during the refining of Kerch pig
iron in a rotary furnace. *Izv. vys. ucheb. zav.; Chern. met.*
5 no.7:19-26 '62. (MIRA 15:8)

1. Moskovskiy institut stali i splavov.
(Iron—Metallurgy) (Rotary-hearth furnaces)

ARSENT'YEV, P.P.; VINOGRADOV, B.G.; FILIPPOV, S.I.

Viscosity and electric conductivity of iron-carbon melts
with additions of manganese and silicon. Izv. vys. ucheb. zav.;
chern. met. 6 no.3:12-19 '63. (MIRA 16:5)

1. Moskovskiy institut stali i splavov. (Iron alloys--Testing) (Liquid metals--Testing)
(Electric conductivity)

VAYNSHTOK, M.I.; MIKHALICH, I.; ARSENT'YEV, P.P.

Effect of aluminum and manganese on the plastic properties of
basic open-hearth low-carbon steel. Izv. vys. ucheb. zav.; Chern. met.
6 no.11:54-59 '63. (MIRA 17:3)

1. Moskovskiy institut stali i splavov.

ACCESSION NR: AP4042546

S/0148/64/000/007/0077/0083

AUTHOR: Vaynshtek, M. I.; Arsent'yev, P. P.; Filippov, S. I.

TITLE: Macrostructure and chemical inhomogeneity of 18-ton ingots of low-carbon steel with additions of aluminum

SOURCE: IVUZ. Chernaya metallurgiya, no. 7, 1964, 77-83

TOPIC TAGS: low carbon steel, 08kp steel, rimmed steel, killed steel, ferrosilicon deoxidized rimmed steel, aluminum deoxidized rimmed steel, steel macrostructure, steel inhomogeneity

ABSTRACT: Partial or complete deoxidation of rimmed steel in molds by aluminum or silicon is one of the means of reducing its chemical inhomogeneity and of increasing the yield of quality metal. The corresponding experiments were carried out with 18-ton ingots of 08kp rimmed steel deoxidized by ferromanganese in a furnace, and additionally by aluminum (130 g/ton) in the ladle. Semikilled and killed steel was produced by adding 0.2 and 0.4 kg/ton, respectively, of aluminum shot during pouring into molds; the metal of two ingots was deoxidized in the mold by an 0.2 kg/ton addition of 45% ferro-

Card 1/3

ACCESSION NR: AP4042546

silicon. All ingots had a dense crust, 20—40 mm thick. A specific feature of the ingots of killed and semikilled steel was the presence of a more or less dense bridge. A partial preservation of this bridge, by limiting the crop to 2%, will ensure welding of shrinkage defects during rolling, thus increasing the yield of quality metal to 93%. The macrostructure of the ingot deoxidized by ferrosilicon was close to that of the rimmed-steel ingot; the semikilled steel macrostructure was close to that of the killed. Ferrosilicon in the amount of 0.2 kg/ton of steel does not ensure a sufficiently uniform distribution of sulfur and carbon in low-carbon rimmed steel. A larger amount of ferrosilicon would increase the silicon content in the steel and impair its plastic properties. The addition of 0.4 kg Al/ton of rimmed steel sharply reduces the inhomogeneity of the ingot with respect to its sulfur and carbon content. A larger addition of aluminum (0.9 kg/ton) has no further effect on ingot inhomogeneity but is needed to neutralize the nitrogen and obtain nonaging steel. However, the ingots of the steel deoxidized by aluminum have a highly nonuniform distribution of aluminum, which in low-carbon steels containing less than 0.02% residual Al can promote strain aging. Orig. art. has 3 figures and 2 tables.

Card 2/3

ACCESSION NR: AP4042546

ASSOCIATION: Moskovskiy institut stali i splavov (Moscow Steel and Alloys Institute)

SUBMITTED: 23Jan64

ATD PRESS: 3070

ENCL: 00

SUB CODE: MM

NO REF SOV: 003

OTHER: 000

Card 3/3

PANCHENKO, Yelena Vasil'yevna, dots.; SKAKOV, Yuriy Aleksandrovich,
dots.; KRIMER, Boris Isaakovich, dots.; ARSENYEV, Petr
Pavlovich, dots.; TSVELING, Mira Yakovlevna, assistant;
POPOV, Konstantin Viktorovich, dots.; Prinsipal'nyy uchastnik
SHARSHATKINA, A.V.; LIVSHITS, B.G., doktor tekhn. nauk,
prof., red.

[Metallographic laboratory] Laboratoriya metallografi.
Moskva, Metallurgiya, 1965. 439 p. (MIRA 18:9)

FILIPPOV, Sergey Lvovich; AKSELMAN, Boris Lvovich; FITSYNA,
V.I., red. 1st-va; KHRYZOVA, G.M., tekhn. red.

[Experiments on the theory of metallurgical processes]
Eksperimental'nye raboty po teorii metallurgicheskikh
protseessov. Izd. 2., perer. i dop. Moskva, Metallurgiz-
dat, 1964. 165 p. (MIRA 17:2)

ARSENT'YEV, P.V. (Mytishchi)

Use of geographical maps in a mathematics class. Mat. v shkola
no.5:46-47 S-0 '63. (SIRA 16:11)

ARSEN'YEV, R.V. (Moskva)

More comfortable suspensories. Med.vestra 21 no.12:45-46 D '62.
(MIBA 16:4)

(BANDAGES AND BANDAGING)

SIDOROV, Pavel Petrovich, kand. ekon. nauk; KOVALEV, Aleksandr
Ivanovich; Prinsipial'no uchastiye KANIBOLOTSKIY, F.P.;
ARSEN'YEV, S.P., red.; DEMIN, A.M., red.

[Economics of river transportation; production economics,
organization, and planning] Ekonomika rechnogo transporta;
ekonomika, organizatsiya i planirovanie proizvodstva. Mo-
skva, Transport, 1965. 283 p. (MIRA 18:5)

MIKOYAN, A.; POPOBORNYY, N.; ZOTOV, V.; PAVLOV, D.; DUDIN, Yu.; KOROLAY, D.;
MASTEROV, N.; NEVSKIY, Ye.; KLEMENCHUK, A.; ARSENIYEV, V.; GAVRILOV, A.;
PARSHIKOV, M.; ZHARSKIY, A.; SKOLOVSKIY, V.

Vladimir Evdokimovich Chalyi; obituary. Kons.i ov.prom. 17 no.12:
48 D '62. (MIRA 15:12)

(Chalyi, Vladimir Evdokimovich, 1905-1962)

ARSENT'EV, V.A.

Advanced labor methods for underground maintenance. Neft.khos.34 no.7:
62-64 J1 '56. (MIRA 9:10)

1.Podzemny remont neftepromyslovoye upravleniya Malgobeknakt'.
(Oil wells--Equipment and supplies--Repairing)

SURNACHEV, A.A., gornyy inzh.; ARSEN'YEV, V.P., gornyy inzh.; NOVIKOV, V.M.,
gornyy inzh.; DUBINSKIY, M.I., kand.tekhn.nauk

Response to P.Z.Zviagin and L.L.Maizel's article "Economic
efficiency of the hydraulic system of underground mining."
Ugol' 37 no.11:54-56 N '62. (MIRA 15:10)

1. Institut gornogo dela AN UkrSSR.
(Hydraulic mining) (Zviagin, P.Z.) (Maizel, L.L.)

24.6710

S/058/62/000/001/089/096
AC61/A101

AUTHORS: Arsent'yev, V. V., Arsent'yeva, Ye. L.

TITLE: Theory of electric discharge development in a liquid

PERIODICAL: Referativnyy zhurnal, Fizika, no. 3, 1962, 72, abstract 321457
(Sb. "Primeneniye ul'traakust. k issled. veshchestva", no. 4,
Moscow, 1961, 101-109)

TEXT: The specific electrical conductivity of a discharge plasma in a liquid and the channel radius of primary ionization are estimated for the edge - plane arrangement. The change with time of channel radius, electrode potential, resistance of channel and discharge current is examined. Particular calculations are carried out for chemically pure water. There are 5 references.

Yu. Mastovoy

[Abstracter's note: Complete translation]

Card 1/1

RESNIKOVSKIY, P., Russian

Mercury (Planet)

"Analytic theory of the secular and long periodic perturbations and movements of Mercury."
P. T. Resnikovskiy, Author Astron zhur 29, no. 4, 1952

Monthly List of Russian Accessions, Library of Congress, November 1952, Unclassified

Bartaya, R. A.

"Determining absolute spectral magnitudes of weak stars of types B5-A7." R.A. Bartaya.
Reviewed by V. V. Arsent'yev. Astron. zhur. 29 No. 4, 1952.

Monthly List of Russian Accessions. Library of Congress, November 1952. UNCLASSIFIED

ARSENT'YEV, V. V.

USSR/Astronomy - Radio Telescope

Aug 53

"New Radio Telescope," V. V. Arsent'yev, State
Astron Inst in P. K. Shternberg

Priroda, No 8, pp 90-91

Describes the British 250-foot radio telescope.
Claims that the theoretical principles of radio-
astronomy were laid by Academicians N. D. Papaleksi
and L. I. Mandel'shtam around 1928. States that
S. E. Khaykin and B. M. Chikhachev, who conducted
the radiophysical observations of the total solar

276146

eclipse of 20 Mar 1947 in Brazil, were able to
demonstrate the Sun's coronal origin of meter waves
by means of small-size instruments rather than by
large bulky devices as in the West, and that it is
therefore correct procedures rather than huge size
that determines the successful solution of astron-
ical problems.

ABSEIT'YEV, V.V.

Meeting of Moscow astronomers with those from the Chinese People's Republic. *Astron.sbur.* 30 no.3:370-371 My-Je '53. (NLRM. 6:5)
(China--Astronomy) (Astronomy--China)

On 23 Mar 53, the Scientific Council of the State Astronomical Institute imeni Shernberg held a session devoted to subject meeting. Prof B.V. Kukarkin, director of the Inst, reported on the work and structure of the Inst and its position in Moscow State U, described each of its various chairs, and enumerated the principal ~~COURSES~~ offered by the chairs
courses

257T74

ARSHV, V.V.

Defense of candidates' dissertations in the Learned Council of the Main
Shternberg Astronomical Institute during 1952. Astron. zhur. 30 no. 4:469-474
Jl-Ag '53. (MIRA 6:8)
(Astronomy)

ABSENT'YEV, V.V.

New radiotelescope. Priroda 42 no.8:90-91 Ag '53.

(MLRA 6:7)

1. Gosudarstvennyy Astronomicheskiy institut imeni P.I. Shternberga.
(Radio astronomy)

AID - P-70

Subject : USSR/Astronomy
Card : 1/2
Author : Arsent'yev, V. V.
Title : Chronicle
Periodical : Astron. zhur., V. XXXI, 1, 102-104, Ja - F 1954
Abstract : Two short notices: 1) The address of Prof. Gil'yermo Aro, Director of Mexican Observatories in Takubaya and Tonantitlan, made at the meeting of the Scientific Council of the State Institute of Astronomy im. P. K. Shternberg; on September 25, 1953, pertaining to astronomical work in Mexico; and 2) A public defense of a dissertation on the "Constitution of Spherical Accumulations of Stars" by Kholopov, P. M., junior scientific collaborator, Astron. Council, Acad. Sci., USSR, under the scientific direction of Prof. Kukarkin, B. V. New exact methods are suggested for determining lines of equal elliptical apparent density in relation

Astron. zhur., V. XXXI, 1, 102-104,
Ja - F 1954 (additional card)

AID - P-70

Card : 2/2

to space density for 20 spherical stellar concentra-
tions. This is a generalization of Wallenquist's
method. Elements of 275 ellipses are determined.

Institution : None

Submitted : No date

Subject : USSR/Astronomy

AID P - 382

Card 1/2 Pub. 8 - 12/12

Authors : Arsent'yev, V. V. and Prodan, Yu.

Title : Chronicle Defense of Theses

Periodical : Astron. zhur., v. 31, 3, 302-304, My-Je 1954

Abstract : Three theses were presented, defended and awarded the degrees of Kandidat of Physico-Mathematical Sciences:
1) Kazachevskiy, V. M., junior collaborator of the Astro-Physical Institute of the Academy of Sciences, Kazakhstan SSR, presented a thesis on "Photometric determination of the reflecting capacity (albedo) of the terrestrial globe". His scientific sponsor was Academician V. O. Fesenkov. The opponent Prof. E. Ya. Bogoslavskaya gave a favorable appraisal.
2) Ryabov, Yu. A., Aspirant for the Chair of Celestial Mechanics, Moscow State University. The theme of his thesis was: "On the analytical theory of the motion of minor planets of the Trojan group". His scientific

AID P - 382

Astron. zhur., v. 31, 3, 302-304, My-Je 1954

Card 2/2 Pub. 8 - 12/12

sponsor was Prof. G. N. Duboshin. Criticized favorably by Prof. B. M. Shchigolev.

3) Shakirova, Kh. R., Aspirant for the Chair of Astronomy of the Physico-Mathematical Department of the Central-Asiatic State University. Her theme was: "Systematical errors in the watch errors observed in different hours of the night with a transit instrument". The scientific sponsor was Prof. V. P. Sheglov, and the opponents wer Prof. K. A. Kulikov and Kandidat Phys.-Math. Sciences Ya. P. Goryelov.

Institution : State Astroncmical Institute im. Shternberg

Submitted : No date

PAYDUSHAKOVA, Lyudmila, doktor(Chechoslovakiya); ARSENI'YEV, Y.A. red.;
BERLOV, A.P., tekhn. red.

[Comets and how they were discovered] Komety i ikh otkrytie.
Moskva, Izd-vo "Znanie," 1958. 23 p. (Vsesoiuznoe obshchestvo po
rasprostraneniia politicheskikh i nauchnykh znanii.(Ser. 8, vyp. 2, no.16)
(MIRA 11:10)

(Comets)

3 (1)

AUTHOR:

Arant'yev, V. V.

SOV/55-58-6-31/31

TITLE:

International Conference of Astronomers (Mezhdunarodny s'yezd astronomov)

PERIODICAL:

Vestnik Moskovskogo universiteta. Seriya matematiki, mekhaniki, astronomii, fiziki, khimii, 1958, Nr 6, pp 239 - 244 (USSR)

ABSTRACT:

From August 12 - 28, 1958, the X International Astronomical Congress (IAS) took place in Moscow. It was attended by more than 1200 delegates and guests from 55 countries of the world. Part of the sessions were held in the main building of the MGU (Moscow State University) and in the Gosudarstvennyy astronomicheskiy institut im. P. K. Shternberga (State Astronomical Institute imeni P. K. Shternberg). The Conference was opened by the Deputy Chairman of the Council of Ministers of the USSR, A. N. Kosygin, who summoned all scientists to a world-wide scientific cooperation. Also A. V. Topchiyev, Vice President of the Academy of Sciences, USSR, pointed to the necessity of establishing international scientific relations. Academician V. A. Ambartsumyan, President of the Organizatsiya of the Congress also claimed the joint solution of the most important problems of present astronomy. The Congress was organized in form of

Card 1/3

International Conference of Astronomers

SOV/55-58-6-31/31

symposia and meetings. A main symposium was devoted to the Hertzsprung-Ressell diagram, which makes it possible to determine important characteristics of the stars, such as mass, dimension, growth, and development. Western, Russian scientists, and scientists from the eastern countries delivered reports on these subjects: P. P. Parenago, I. M. Kopylov, K. A. Barkhatova, V. A. Krat, A. G. Masevich, V. G. Fesenkov, G. M. Idlis, Ye. P. Fedorov, A. A. Nemiro, N. N. Pavlov spoke about the rotation of the earth and the atom standard time. The following was dealt with in two informal symposia: 1) problems of the terrestrial and planetary orbit. The lectures by B. Yu. Levin, Sifonov contained new assumptions which resulted from the cosmogenic theory by O. Yu. Shmidt. 2) Problems on the formation of meteoritic materials were dealt with by A. P. Vinogradov, V. G. Fesenkov, A. A. Yavnel', A. B. Severnyy, E. R. Mustel', V. A. Krat, I. S. Shklovskiy, S. N. Vernov, A. Ye. Chudakov, T. N. Nazarov, Ya. L. Al'pert, V. I. Krasovskiy, L. A. Zhekulin, A. N. Kazantsev. The following reports were given within the framework of the discussions: Ye. D. Pavlovskaya, Yu. P. Pskovskiy, D. A. Frank-Kamenetskiy, P. E. Nuzirovskiy, E. Z. Sagdeyev, B. A. Tverskiy, F. Link (Czechoslovakia). Besides

Card 2/3

International Conference of Astronomers

SOV/55-58-6-31/31

these lectures informal discussions were organized by the
GAISH, by I. S. ~~Sh~~lovskiy, B. A. Vorontsov-Vel'yaminov. One
of the four new Vice Presidents was B. Sternberk from
Czechoslovakia.

Card 3/3

ARSEN'YEV, V.V.

Tenth Congress of the International Astronomical Association.
Astron. tsir. no.105:26-27 S '58. (MIRA 12:12)
(Astronomy--Societies, etc.)

ARSENT'YEV, V., nauchnyy sotrudnik

Atmospheric temperature. Izobr. i rats. no. 12;27 D '59.
(MIRA 13;8)

1. Gosudarstvennyy astronomicheskiy institut imeni P.K. Shternberga.
(Atmospheric temperature)

PHASE I BOOK EXPLOITATION

SOV/3651

Vsesoyuznoye astronomo-geodezicheskoye obshchestvo

Astronomicheskiy kalendar' 1960 (Astronomical Calendar, 1960) Moscow, Fizmatgiz, 1959. 351 p. (Series: Ito: Yezhegodnik; peremennaya chast', vyp. 63) 7,200 copies printed.

Ed.: I.Ye. Rakhlin; Tech. Ed.: S.N. Akhlanov; Editorial Board: P.I. Bakulin (Resp. Ed.), M.M. Dagayev, S.G. Kulagin, A.G. Masovich, P.P. Parenago.

PURPOSE: The book is intended for astronomers and geophysicists and physicists interested in astronomical phenomena.

COVERAGE: This yearbook on astronomy was compiled by a number of Soviet scientists specializing in several different branches of astronomy. The following persons participated in the work: L.D. Kovbasyuk, who wrote the chapters on ephemerides of the Sun and Moon; M.M. Dagayev, the chapters on planets, eclipses, physical coordinates of the Sun, Moon, Mars, and Jupiter, and the satellites of Jupiter and Saturn; V.S. Lazarevskiy, the chapters on ephemerides and heliocentric longitudes of planets; Ye.G. Demidov, the chapters on occultation of stars and planets by the Moon, observations of Polaris and computation of coor-

Card 1/6

Astronomical Calendar, 1961

307/3651

dinates of stars; V.A. Bronshten, the chapters on comets; K.S. Yakhontova, sections on minor planets; and N.B. Perova, the chapters on variable stars. The appendixes contain articles on recent developments and events in astronomy such as the launching of the first Soviet space rocket, the 10th Congress of the International Astronomical Association held in Moscow in August 1958, developments in astronomy in 1958 during the IGY. There are 385 references, all Soviet.

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PESENKOV, Vasilii Grigor'yevich, akademik; ARSENT'YEV, V.V., red.;
STRELKOVA, M.A., red.isd-va; SAVCHENKO, Ye.V., tekhn.red.

[What the results of observations on the origin of the solar
system tell us] Chto govoryat dannye nabljudeniia o proiskhozh-
denii solnechnoi sistemy. Moskva, Izd-vo "Znanie," 1960. 47 p.
(Vsesoiuznoe obshchestvo po rasprostraneniuiu politicheskikh i
nauchnykh znani. Ser.9. Fizika i khimiia, no.1) (MIRA 13:1)
(Solar system) (Cosmogony)

KULAGIN, S.G.; KOVBASYUK, L.D.; DAGAYEV, M.M.; LAZAREVSKIY, V.S.; KAVRIN,
A.A.; KUKLIN, B.V.; CHERNYKH, N.S.; DEMIDOVICH, Ye.O.; BRONSHTEIN,
V.A.; YAKHONTOVA, N.S. (Leningrad); PEROVA, M.B.; DOKUCHAYVA,
O.D.; KATASEV, L.A.; MASVICH, A.G.; SHEKHENINA-SAMOYLOVA, I.S.;
ARSENT'YEV, V.V.; FRANK-KAMENETSKIY, D.A.; LUTKIN, G.A.; SHEKHOLEV,
P.V.; PEREL', Yu.G.; BAKULIN, P.I.. otv.red.; MASVICH, A.G., red.;
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obshchestvo, no.6j)
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1. Gosudarstvennoye astronomo-geodesicheskoye obshchestvo (GAGO)
(for Kulagin, Kovbasyuk, Lazarevskiy, Demidovich). 2. Moskovskoye
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KULAGIN, S.G.; KOVBASYUK, L.D.; DAGAYEV, M.M.; LAZAREVSKIY, V.S.;
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1. Gosudarstvennoye astronomo-geodesicheskoye obshchestvo (for Kalugin, Kovbasyuk, Lazarevskiy, Demidovich). 2. Moskovskoye otdeleniye Vsesoyuznogo astronomo-geodesicheskogo obshchestva (for Dagayev, Bronshteyn, Kurochkin). (Astronomy--Yearbooks)

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J1157

S/058/62/000/004/066/160
A058/A1C1

AUTHOR: Arsent'yev, V. V.

TITLE: On the theory of the shock waves arising incident to electric discharges in liquids

PERIODICAL: Referativnyy zhurnal, Fizika, no. 4, 1962, 31, abstract 40265
(V sb. "Primeneniye ul'traakust. k issled. veshchestva". no. 13, Moscow, 1961, 111-120)

TEXT: Incident to electric discharges in liquids the temperature in the region of the discharge channel rises to several tens of thousands of degrees. This leads to the discharge channel and the region adjacent to it being filled with gaseous products (discharge plasma) under very high pressure. As a result the liquid particles adjacent to the channel are set in motion and a shock wave is formed in the liquid. In a first approximation we can assume that a sharp boundary exists between the plasma and the liquid. Owing to the rapidity of events, the process of hydrodynamic expansion of the discharge plasma can be approximately regarded as adiabatic, neglecting thereby dissipation processes. Inasmuch as pulse charges are of very brief duration, the hydrodynamic expansion

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S/194/62/000/005/076/157
D222/D309

AUTHOR: Arsent'yev, V.V.

TITLE: On the theory of shock waves arising with an electric discharge in a liquid

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika no. 5, 1962, abstract 5-5-33 d (V sb. Primeneniye ul'traakust. k issled. veshchestva, no. 14, 1961, M., 11-120)

TEXT: A theoretical investigation of the processes developing during an electric discharge in a liquid. The energy integral of the shock wave, the motion equation of the boundary of the discharge channel under hydrodynamic propagation, the integral of the impulse, an equation for the energy density of the shock wave, and an equation for the density of the impulse flow are obtained. 7 references. [Abstractor's note: Complete translation].

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Theory of the development of an electric discharge in a fluid. *Trin.*
ul'traakust. kisl. veshch. no.14:101-109 '61. (MIRA 14:12)
(Electric discharges) (Plasma (Ionized gases))

ARSENT'YEV, V.V.

Theory fo shock waves arising in electric dischargus in fluids.
Prim. ul'traakust. k issl. veshch. no.14:111-120 '61. (MIRA 14:12)
(Shock waves) (Electric discharges) (Plasma (Ionized gases))