

LUZGIN, V.P.; VISHNAREV, A.F.; YAVOYSKIY, V.I.

Interaction of oxygen and carbon in liquid iron. Izv. vyz. ucheb.  
zav.; Chern. met. 8 no.122-25 '65 (MIRA 18:1)

1. Moskovskiy institut stali i splavov.

YAVOYSKIY, V.I., doktor tekhn.nauk; MATEVOSYAN, P.A., inzh.; KRYAKOVSKIY,  
Yu.V., kand.tekhn.nauk; TYURIN, Ye.I., kand.tekhn.nauk; VISHKAREV,  
A.F., kand.tekhn.nauk; PERMYAKOV, L.N., inzh.; ANTIPOV, K.I., inzh.

Using rare-earth elements in the making of structural, alloyed  
and stainless steel. Stal' 23 no.5:422-425 My '63. (MIRA 16:5)  
(Steel--Electrometallurgy) (Rare-earth metals)

U DIN-FEN' [Wu Ting-fen]; VISHKAREV, A.F.; YAVOYSKIY, V.I.

Surface tension of iron and lime slags. *Izv.vys.ucheb.zav.;chern.*  
met. 6 no.1:27-33 '63. (MIRA 16:2)

1. Moskovskiy institut stali i splavov.  
(Slag) (Surface tension)

37238

S/148/62/000/003/003/011  
E071/E435

18.1100

AUTHORS: Vishkarev, A.F., Kryakovskiy, Yu.V.,  
Bliznyukov, S.A., Yavoyskiy, V.I.

TITLE: Influence of rare earth elements on the surface  
tension of liquid iron

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy,  
Chernaya metallurgiya, no.3, 1962, 60-67

TEXT: The surface activity of rare earth elements in iron is of importance from the point of view of their modifying effect which is caused by preferential adsorption of surface active components on faces of growing crystals, inhibiting their growth. In multi-component systems, changes in the surface tension could be due not only to the adsorption of a given component but also due to various physico-chemical processes taking place in the melt (e.g. deoxidation, desulphurization, changes in the activity of other components), for this reason the influence of rare earth elements on the surface tension of specially purified liquid iron was measured (not more than: 0.020% C, 0.015% Mn, 0.005% Si, 0.0028% P, 0.002% S and 0.003% O<sub>2</sub>). The method  
Card 1/3

S/148/62/000/003/003/011  
E071/E435

Influence of rare earth ...

consisted of measuring the maximum pressure of gas bubbles in vacuo or in a controlled atmosphere. Well purified argon was used for blowing bubbles and as a protective atmosphere. The apparatus and experimental procedure are described in some detail. It was found that cerium and lanthanum are surface active. In all cases, first additions of cerium (up to 0.45%) lower the surface tension of iron by 100 to 120 erg/cm<sup>2</sup>, whilst further addition of cerium increases the surface tension of iron due to its reaction with oxygen and sulphur. Lanthanum acts similarly but a decrease in the surface tension was noted only after the first addition (0.1%). This is explained by a higher deoxidizing and desulphurizing ability of lanthanum in comparison with cerium. The influence of the admixtures present in iron on changes in the surface tension on the addition of rare earth elements (Ce, La, Nd, Pr) was demonstrated by using ordinary armco iron and carrying out experiments without a protective atmosphere. In this case additions of rare earth elements caused an increase in the surface tension of iron; only in a few cases was a small decrease observed after the first addition. This indicates that the

Card 2/3

Influence of rare earth ...

S/148/62/000/003/003/011  
E071/E435

increase in the surface tension is associated with the deoxidation and desulphurization of the metal (in the case of deoxidation confirmed by analysis). The modifying influence of additions of rare earth elements was confirmed on special heats of X23H18 (Kh23N18) steel made in a 30 kg induction furnace. The grain size of the metal in the cast state was found to be diminishing with an increasing amount of rare earth element added. There are 6 figures and 2 tables.

ASSOCIATION: Moskovskiy institut stali (Moscow Steel Institute)

SUBMITTED: November 22, 1961

Card 3/3

X

DZHOSHI, V.B.; VISHKAREV, A.F.; YAVOYSKIY, V.I.

Role of surface phenomena in processes of hydrogen distribution  
between metal and the gaseous phase. Izv.vys. ucheb. zav.; Chern.  
met. no.3:23-30 '61. (MIRA 14:3)

1. Moskovskiy institut stali.  
(Surface chemistry) (Steel—Hydrogen content)

YAVOYSKIY, V.I.; VISHKAROV, A.F.

Oxidation of molten metal additions in the steelmaking process.  
Report no.2: Oxidation of silicon and phosphorus. Izv.vys.  
ucheb.zav.; chern.met. no.7:24-31 '60. (MIRA 13:8)

1. Moskovskiy institut stali.  
(Steel--Metallurgy)



VISHKAREV, A.F.; KRYAKOVSKIY, Yu.V.; BLIZNYUKOV, S.A.; YAVOYSKIY, V.I.

Effect of rare-earth elements on the surface tension of liquid  
iron. Izv. vys. ucheb. zav.; chern. met. 5 no.3:60-66 '62.  
(MIRA 15:5)

1. Moskovskiy institut stali.  
(Rare earth metals) (Liquid metals) (Surface tension)

S/148/60/000/011/003/015  
A161/A030

**AUTHORS:** Dzhoshi, V. B.; Vishkarev, A. F ; Yavoyskiy, V. I.

**TITLE:** The role of surface phenomena in the distribution of nitrogen between molten metal and gas phases

**PERIODICAL:** Izvestiya vysshikh uchebnykh zavedeniy. Chernaya metallurgiya, no. 11, 1960, 36 - 44

**TEXT:** The effect of nitrogen on the properties of steel is considerable, and its content in converter steel is higher than in other types. Many phenomena observed concerned with the behaviour of nitrogen are not yet clear, and investigations are necessary in view of the increasing extensive use of the converter process, particularly of the oxygen process. No reliable data are available on the effect of carbon on the nitrogen absorption rate, and only indirect data make some conclusions possible. The measurement of surface tension at high temperatures is only possible with two methods: "recumbent drop" and maximum pressure in the bubble". The latter was used in the described experiments at the Moscow Steel Institute.

Card 1/4

S/148/60/000/011/003/015  
A161/A030

The role of surface phenomena in ...

The measuring installation was similar with the one formerly described (Ref. 6 - 7: 6 - S. I. Filippov, book "Theory of steel decarbonization", 1956; 7 - V. P. Grigoriyev, A. F. Vishkarev, B. G. Korolev, Ye. V. Abrosimov, V. I. Yavovskiy. Izv. vyssh. uch. zav. Chernaya metallurgiya, 1960, No. 4). The surface tension was measured with alundum capillaries giving stable indications during one hour when properly prepared. The end to be submerged into metal was turned down from outside and bored to a cone from inside, and the butt surface was ground. As stated, in comparison with measurements using alundum and quartz capillaries, with the former the bulb separates mostly from the inner cone in the bored duct, with the diameter between 2.8 and 3.2 mm. The deviation from the true spherical shape of the bulb has to be taken into account in calculations, and this was done using the successive approximation method. Metal was melted in argon carefully purified from oxygen and steam using crucibles cut from magnesite brick. Samples were taken after a constant temperature of  $1575 \pm 10^{\circ}\text{C}$  was reached; after the stabilized bubbling of argon (6-7 bubbles a minute), argon blowing was replaced by nitrogen (at the rate 2.5 - 3.0 lit/min), and the surface tension variations were measured along with periodical sampling of metal for chemical analysis. The studied metal was killed armco iron

Card 2/4

S/148/60/000/011/003/015  
A161/A030

The role of surface phenomena in ....

with 0.03 % C; 0.13 % Mn; 0.18 % Si; 0.020 % S and 0.045 % P. The effect of the third component on the surface activity was studied with additions of electrolytic manganese, crystalline silicon and a synthetic iron-carbon alloy with 2.65 % C; 0.08 % Si and 0.06 % Mn. The N adsorption values were calculated using the Gibbs equation (Russian spelling) which is actually true for binary systems (considering iron-carbon alloy as one component). Conclusions: 1) Nitrogen in liquid iron presents a surface-active component. The surface tension varies with the nitrogen content: it drops when nitrogen is being absorbed, and rises when nitrogen is being liberated. 2) The increase of the carbon content in the iron is accompanied by a weakening surface activity of nitrogen, and the nitrogen adsorption varies in inverse proportion to the carbon content. 3) The effect of carbon on the surface activity of nitrogen is due to carbon adsorption in the surface layers, i.e., the carbon on the surface obstructs the adsorption of nitrogen. 4) The rate of nitrogen absorption and desorption with iron depends on the carbon content in iron; it drops with increasing carbon content. This means that the structure of the surface layer has a considerable effect. 5) The effect of silicon and manganese is analogous to the effect of carbon but less strong. There are 9 figures, 7 Soviet references and 3 English references. The three English language publications read as follows: Ref.1: Card 3/4

S/148/60/000/011/003/015  
A161/A030



The role of surface phenomena in ...

Chipman and Murphy. Metals Technology, No. 1, 1955. "Iron and Steel Division", AIMME, V - 116, 1935; Ref. 4 - Darken and Curry. Physical Chemistry of Metals; Ref. 8 - V. G. Paranjpe, M. Cohen, M. B. Bever, C. F. Floe. Journal of Metals, 1950, 188, No. 2, 261.

ASSOCIATION: Moskovskiy institut stali (Moscow Steel Institute)

SUBMITTED: May 20, 1960

Card 4/4

KINNE, G.; VISHKAREV, A.F.; YAVOYSKIY, V.I.

Deoxidizing properties of rare-earth elements (lanthanum, cerium, praseodymium, and neodymium). Izv. vys. ucheb. zav.; Chern. met. 6 no.5:65-69 '63. (MIRA 16:7)

1. Moskovskiy institut stali i splavov.  
(Rare-earth metals) (Iron--Metallurgy)

LUZGIN, V.P.; VISHKAREV, A.F.; YAVOYSKIY, V.I.

Determining oxygen activity in Fe-C-O melts by the electromotive force method. Izv. vys. ucheb. zav.; Chern. met. 6 no.5:44-50 '63. (MIRA 16:7)

1. Moskovskiy institut stali i splavov.  
(Liquid metals--Oxygen content)  
(Vapor-liquid equilibrium)

VISHKAROV, A.F., inzh.; KONDAKOV, V.V., prof., doktor tekhn. nauk.

Elimination of nonmetallic inclusions during vacuum metallurgy.  
Spor. Inst. stali no.38:196-208 '58.      (MIRA 11:8)

1. Kafedra teorii metallurgicheskikh protsessov Moskovskogo insti-  
tuta stali im. Stalina.  
(Vacuum metallurgy)      (Metals—Analysis)



GRIGOR'YEV, V.P.; VISHKAREV, A.F.; KOROLEV, B.G.; ABROSIMOV, Ye.V.;  
YAVOYSKIY, V.I.

Effect of phosphorus and manganese on the surface tension  
of iron-carbon alloys. Izv.vys.ucheb.zav.; Chern.Met. no.4:  
55-65 '60. (MIRA 13:4)

1. Moskovskiy institut stali.  
(Iron alloys) (Surface tension)

YAVOYSKIY, V.I.; VISHKAREV, A.F.

Oxidation of the additives to molten metal in the steelmaking  
process. Report No.1. Izv.vys.ucheb.zav.; chern.met. no.5:  
39-48 '60. (MIRA 13:6)

1. Moskovskiy institut stali.  
(Steel—Metallurgy)

VISHKAREV, A.F., Cand Tech Sci -- (diss) "Effect <sup>of</sup> vacuuming  
*the quantization of* *inclusions*  
upon breaking-down nonmetallic occlusions in steel." Mos,  
1958, 12 pp (Min of Higher Education USSR. Mos Order of  
Labor Red Banner Inst of Steel in I.V. Stalin. Chair of  
Theory of Metallurgical Processes) 120 copies (EL, 23-58, 105)

VISHKAREV, A. F. (Engr.); ZHUKHOVITSKIY, A. A. (Prof., Dr. Chem. Sci.); CHELISHCHEV, E. V.

"Exchange and Distribution of Iron Between the Slag and Metal Phases in a Steel Smelting Process;" in the Book - The Application of Radioisotopes in Metallurgy, Symposium XXXIV; Moscow; State Publishing House for Literature on Ferrous and Nonferrous Metallurgy, 1955.

E. V. CHELSHCHEV; A. F. VISHKAREV, Engr.; Prof. A. A. ZHUKHOVITSKIY, Dr. Chem. Sci., Scientific Consultant/Chair of Theoretical Metallurgy, Moscow Inst. Steel im I. V. Stalin.

KOZLOV, V.I.; VISHKAREV, A.F.; ZIL'BERMAN, A.G.; YAVOYSKIY, V.I.

Diffusion of carbon and oxygen in liquid steel. Izv. vys.  
ucheb. zav.; chern. met. 4 no.11:38-44 '61. (MIRA 14:12)

1. Moskovskiy institut stali.  
(Gases in metals)  
(Diffusion)

BARTENEV, G. M., VISHNITSKAYA, L. A.

Rubber

Investigating the highly elastic and thermodynamic properties of rubber crystallizing under tension. Zhur. tekhn. fiz. 22 no. 3, 1952.

9. Monthly List of Russian Accessions, Library of Congress, August 1952, ~~1953~~, Uncl.

VISHIYEVITSKIY, A. Ya.

Vishiyevetskiy, A. Ya. - "An analysis of the work of the Gost Selective Medical Commission for the Rehabilitation of Invalids of the Great Fatherland War." Trudy Leningr. obl. gosspitalys dlya lecheniya invalidov Otechestv. voyny, Leningrad, 1948, p. 12-17

SO: U-3850, 16 June 53, )Letopis 'Zhurnal 'nyth Staley, No. 5, 1949).

VISHKAREV, A. F. and KONDAKOV, V. V.  
Moscow Inst. of Steel.

"Decomposition of the Non-Metallic Inclusions at the Vacuum Steel Treatment."

paper presented at Second Symposium on the Application of Vacuum Metallurgy.



SOV/137-58-12-24242

Translation from: Referativnyy zhurnal Metallurgiya, 1958, Nr 12, p 46 (USSR)

AUTHOR: Vishkarev, A F., Kondakov, V V.

TITLE: Destruction of Nonmetallic Inclusions in Vacuum Treatment of Metal  
(Razrusheniye nemetallicheskih vklyucheniy pri obrabotke metalla vakuomom)

PERIODICAL: Sb. Mosk. in-t stali, 1958, Vol 38, pp 196-208

ABSTRACT: Nonmetallic inclusions (NI) in the metal (Me) are destroyed by vacuum treatment (VT) of steel (St) through an increase in the deoxidizing capacity of C. This process makes its appearance simultaneous with decarburization. The partial pressure in the resultant CO bubbles depends chiefly upon the conditions of CO-bubble formation. NI within the molten Me in the suspended condition are simultaneously CO bubble-formation nuclei and participants in the decarburization reaction. Adsorption of C also occurs on the NI surface. Fe with additions of C, Mn, Si, and Al is employed in the melts. A method for determining gases and NI in the St is described. After VT, 65-75% of the NI of the MnO and MnO·FeO variety are destroyed, as well as

Card 1/2

SOV/137-58-12-24242

Destruction of Nonmetallic Inclusions in Vacuum Treatment of Metal (cont.)

75-85% of the  $Cr_2O_3$ -type of NI, since chromium inclusions are found in the Me in the solid form which is favorable to formation of CO bubbles. Silicate inclusions are 50-55% destroyed, and the content of aluminates is reduced by 30-40%. The amount of [C] fluctuates from 0.1 to 1% in all variants. The degree of the destruction of NI inclusions is in direct ratio to their thermodynamic stability. The change in gas pressure during the heats shows the rate of NI destruction to be independent of both [C] and the type of NI. VT causes a sharp reduction in the number of large NI. Distribution of NI in the Me becomes more uniform.

V. B

Card 2/2

S/148/62/000/009/002/007  
E111/E435

AUTHORS: Kinne, G., Vishkarev, A.F., Yavoyskiy, V.I.  
TITLE: Thermodynamics of the deoxidation of steel with  
lanthanum, cerium, praseodymium and neodymium  
PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Chernaya  
metallurgiya, no.9, 1962, 92-98

TEXT: Published data are used to calculate the thermodynamic characteristics applicable to lanthanum, cerium, praseodymium and neodymium when used for steel deoxidation. The activity of cerium at steelmelting temperatures is estimated from the phase equilibrium diagram. Up to 5% Ce the following equations hold

$$a_{Ce} = 3.9 [\% Ce] - 0.138 [\% Ce]^2 \tag{5}$$

$$\gamma'_{Ce} = 3.9 - 0.138 [\% Ce] \tag{6}$$

$$\gamma_{Ce} = 3.9 - 3.29 [N_{Ce}]$$

the other elements can be assumed to behave similarly. Vapour-  
Card 1/2

Thermodynamics of the deoxidation ... S/148/62/000/009/002/007  
E111/E435

pressure calculation for 1% concentration at 1600°C shows that there can be hardly any evaporation of Ce and La, whereas certain oxides (particularly  $Ce_2O_3$ ) could evaporate. The deoxidizing power of the elements is greater than that of aluminium or zirconium and sometimes may exceed that of beryllium; it rises in the following order: Ce, La, Pr, Nd if  $CeO_2$  is produced or La, Pr, Nd, Ce if  $Ce_2O_3$  is produced. For experiments the authors recommend crucibles of CaO,  $ThO_2$ ,  $La_2O_3$ ,  $Ce_2O_3$ ,  $Nd_2O_3$ ,  $Pr_2O_3$  or stable nitrides. There are 4 figures and 3 tables. ✓

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

SUBMITTED: April 25, 1962

Card 2/2

CHELISHCHEV, Ye.V., dotsent, kandidat tekhnicheskikh nauk; ~~VISHKAREV, A.F.,~~  
inzhener.

Exchange and distribution of iron between the slag and metallic phase in  
the steel smelting process. Sber. Inst.stali 34:128-145 '55.(MLRA 9:7)

1.Kafedra teorii metallurgicheskikh protsessov.  
(Iron--Isotopes) (Steel--Metallurgy)

CHERVYAKOV, D.K., prof.; VISHKER, A.S., dotsent

Basis for the use of medicinal substances in rumen diseases.  
Veterinariia 40 no.3:30-35 Mr '63. (MIRA 17:1)

1. Kuznetskiy veterinarnyy institut.

VISHKIN, A.S., kandidat veterinarnykh nauk.

Chem-prophylactic action of hemosporidin in piroplasmosis in horses.  
Veterinariia 33 no.3:34-36 Mr '56. (MLRA 9:5)

1. Kazanskiy gosudarstvennyy veterinarnyy institut.  
(PIROPLASMOSIS) (HORSE--DISEASES)

VISHNER, A. S.

"Question of the Effect of 'Novoplasmin' and 'Hemosporidin' (anti-piroplasmotic) on the Motor Activity of the Stomach of Domestic Animals." Cand Vet Sci, Kazan' Veterinary Inst imeni N. E. Bauman, Kazan', 1954. (KL, No 8, Feb 55)

SO: Sum. No. 631, 26 Aug 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (14)



81393

S/056/60/039/004/007/048  
B004/B070

24.6900  
AUTHORS:

Van Shu-fen', Vishki, T., Gramenitskiy, I. M., Grishin,  
V. G., Dalkhazh'ay, N., Lebedev, R. M., Nomofilov, A. A.,  
Podgoretskiy, M. I., Strel'tsov, V. N.

TITLE: Inelastic Interactions of 9 Bev Protons With Nucleons

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960,  
Vol. 39, No. 4(10), pp. 957-960

TEXT: In an earlier work (Ref. 1), the authors carried out the identification of particles and the measurement of their energies only for slow particles. In the present work, the study of pp and pn interactions is continued under conditions permitting the measurement of multiple scattering of fast particles. An НИКФИ-Р (NIKFI-R) emulsion pile was irradiated by 9-Bev protons from the proton-synchrotron of the authors' institute. The inelastic pp (161 events) and pn (94 events) interactions were selected according to the criterion described in Ref. 1. The average number of charged particles in pp interactions was  $3.25 \pm 0.10$

Card 1/3

84391

Inelastic Interactions of 9 Bev Protons  
With Nucleons

S/056/60/039/004/009/048  
B004/B070

and in pn interactions  $2.58 \pm 0.14$ . The identification was made according to Ref. 3 by means of the function  $g/g_0 = f(p\beta)$  for pions and protons. The identification was not certain in the range  $(1.5 \leq p\beta \leq 2.5 \text{ Bev/c})$  where the curves for protons and pions intersected one another (Table 1). The angular distribution of the secondary protons (in c.m.s.) from pp interactions was strongly anisotropic; the same was true for the pions (Fig. 2). The momentum distribution is shown only for the protons emitted backwards (Fig. 3), because due to spurious scattering only the lower limit of  $p\beta$  could be determined for forward emission. Fig. 4 gives the angular distribution of protons in pn interactions. Since there is no difference in the values of angular distribution and energy for pp and pn interactions, the authors treat the two together for higher statistical accuracy. The values of  $\bar{p}$ ,  $\bar{p}_1$ , and  $\bar{\theta}$  for protons and pions are given in Table 2 for lower ( $n = 2, 3, 4$ ) and higher ( $n = 5, 6, 7$ ) multiplicities. The

values of  $\alpha = \sqrt{p_1^2/2}$  for the lower and higher multiplicities are given in Table 3. The data show that the character of the interaction is only slightly affected by the number of the secondary charged particles.

Card 2/3

04571

Inelastic Interactions of 9 Bev Protons  
With Nucleons

S/056/60/019/004/009/048  
B004/B070

The authors thank D. I. Blokhintsev and V. I. Veksler for discussions.  
There are 4 figures, 3 tables, and 7 references: 6 Soviet and 1 US.

ASSOCIATION: Ob"yedinenny institut yadernykh issledovaniy (Joint  
Institute of Nuclear Research)

SUBMITTED: May 12, 1960

X

Card 3/3

VISHKI, T.; GRAMENITSKIY, I.M.; KORBEL, Z.; NOMOFILOV, A.A.; PODGORETSKIY,  
M.I.; ROB, L.; STREL'THOV, V.N.; TUVDENDORZH, D.; KHVASTUNOV, M.S.

Inelastic interactions between protons and nucleons at an energy  
of 9 Bev. Zhur.eksp.i teor.fiz. 41 no.4:1069-1075 0 '61.  
(MIRA 14:10)

1. Ob'yedinennyy institut yadernykh issledovaniy.  
(Protons) (Nucleons)

VISHKIN, Boris Aleksandrovich, 1914-1950

Flora of the Khibiny Mountains, its analysis and history Moskva, Izd-vo Akademii nauk  
SSSR, 1953. 112 p. (54-22473)

QK375.M5

VISHKOVSKIY, D.P.

*copy*  
USSR/Chemistry - Quinones

Apr 52

"Oxidative and Oxidative-Hydrolytic Transformations of Organic Molecules XXIII. Mechanism of Oxidation-Reduction and Hydrolytic Conversion of 2-Chloro-3-Ly-droxy-1, 4-Naphthoquinone," D. P. Vishkovskiy, M. M. Shemyakin, Lab of Org Chem, Inst of Biol and Med Chem, Acad Med Sci USSR

"Zhur Obshch Khim" Vol XXII, No 4, pp 679-687

The above reaction was investigated by boiling the substance in a water-alkali soln in presence of atm  $O_2$ . Phthalide carboxylic acid, phthalonic acid, phthalic acid, indanone-1-carboxylic acid-(3), isona-phthazarine, and a substance with the general formula  $C_{27}H_{12}O_3$  which are formed, are the result of 2 parallel but connected processes, one of which is oxidative-hydrolytic, the other reductive-hydrolytic. 224T47

VISHNAKOVA, L.A.; BESSONOVA, M.A.

Outbreak of ornithosis infection at a meat combine in Vyborg.  
Trudy Len.inst.epid.i mikrobiol. 23:273-277 '61. (MIRA 16:3)

1. Iz laboratorii osobo opasnykh infektsiy i rekketsiozov  
Leningradskogo instituta epidemiologii i mikrobiologii imeni  
Pastera i otdela osobo opasnykh infektsiy Leningradskoy oblastnoy  
sanitarno-epidemiologicheskoy stantsii.  
(VYBORG--ORNITHOSIS)

NOVIKOV, Il'ya Izriellovich; ZAKHAROV, Mikhail Vasil'yevich. Primal  
uchastiye BORIN, F.A., dots.; DOBATKIN, V.I., doktor tekhn.  
nauk, retsenzent; Primal uchastiye VISHNAYKOV, D.Ya., prof.,  
doktor tekhn. nauk; ARKHANGEL'SKAYA, M.S., red. izd-va; KARASEV,  
A.I., tekhn. red.

[Heat treatment of metals and alloys] Termicheskaya obrabotka me-  
tallov i splavov. Pod obshchei red. I.I. Novikova. Moskva, Me-  
tallurgizdat, 1962. 429 p. (MIRA 15:12)  
(Metals--Heat treatment)



VISHNEGRADSKIY, I. A., MAXWELL, D. K. and STODOLA, A.

"The theory of automatic regulation" (Teoriya avtomaticheskogo regulirovaniya), published by the State Publishing House for the Academy of Sciences of the USSR, Moscow. 1949.

VISHNENKO, A.

Results of the hydrometeorological service in Kazakhstan range-  
pasture animal husbandry. Meteor. i gidrol. no.10:31-32 N-D '53.  
(MIRA 8:9)  
(Kazakhstan--Meteorology, Agricultural)

VISHNENKO, A.S.

Hydrometeorological service for range cattle breeding in  
connection with driving cattle through mountain passes.  
Meteor. i gidrol. no.10:53-54 0 '56. (MLRA 9:12)

(Meteorology, Agricultural)

VISHNEPOL'SKAYA, A.G.

Influence of reading practice on orthography. Vop. psikhol. 5  
no.3:129-138 My-Je '59. (MIRA 12:9)

1. Komsomol'skiy-na-Amure pedinstitut.  
(Russian language--Orthography and spelling)

VISHNEPOL'SKAYA, A.G.

Correction as a method for teaching spelling. Vop. psikh. 6  
no.5:93-102 S-0 '60. (MIRA 13:11)

1. Komsomol'skiy-na-Amure pedagogicheskiy institut.  
(Russian language--Orthography and spelling)

VISHNEPOL'SKAYA, A. G.

VISHNEPOL'SKAYA, A. G. -- "The Effect of the Relationship of Certain Orthograms in the Russian Lexicon on the Mastery of Orthography (Psychological Investigation)." Academy of Pedagogical Sciences RSFSR. Moscow, 1955. (Dissertation for the Degree of Candidate in Pedagogical Sciences).

So.: Knizhnaya Litopis', No. 7, 1956.

VISHNEPOL'SKAYA, A.G.

Effect of the correlation between orthograms in the vocabulary on  
the students' orthography. Vop.psikhol. no.1:81-89 Ja-F '56.

(MLRA 9:5)

1. Komsomol'skiy-na-Amure pedagogicheskiy institut.  
(Russian language--Orthography and spelling)

VISHNEPOLSKAYA, F.,  
M. BAUMAN, Masloboino Zhirovoe Delo 11, 477-9 (1935)





BEZUGLOV, I.Ye.; KURDYUMOV, V.N., inzh.; V rabote prinimali uchastiye:  
GABRILENKO, I.V.; GRABOVSKIY, I.I.; NESHCHADIM, A.G.; PELOBORODOV,  
V.V.; VISHNEPOL'SKAYA, F.A.; MATSUK, Yu.P.; GAYTSKHOKI, N.I.;  
USACHEV, A.S.; ABKINA, N.N.; RUMYANTSEVA, A.G.; KOSHELEV, A.P.;  
GRIGOR'YEV, F.L.; LUKASHVICH, A.M.; STYAZHKINA, A.G.; MIKHAYLOVICH,  
A.N.; YEDEMSKIY, P.M.; MASLOV, P.V.; KUDRYASHEVA, Z.P.; PROSMUSHKIN,  
R.M.; SHTAL'BERG, V.A.; BOYTSOV, N.I.

Operational experience with a newly introduced oil-extraction line  
equipped with the DS-70 belt-conveyer extractor. Masl.-zhir.prom.  
26 no.3:29-31 Mr '60. (MIRA 13:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov (for  
Bezuglov, Gabrilenko, Grabovskiy, Neshchadim, Beloborodov,  
Vishnepol'skaya, Matsuk and Gaytskhoki). 2. Leningradskiy  
zhirovoy kombinat (for Kurdyumov, Usachev, Abkina, Rumyantseva,  
Koshelev, Grigor'yev, Lukashevich, Styazhkina, Mikhaylovich,  
Yedemskiy, Maslov, Kudryasheva, Prosmushkin). 3. Leningradskoye  
otdeleniye tresta "Prodmontazh" (for Shtal'berg and Boytsov).  
(Leningrad--oils and fats)  
(Extraction apparatus)

RZHEKHIN, V.P., starshiy nauchnyy sotrudnik; BODYAZHINA, Z.I.; VENGEROVA, N.V.; VISHNEPOL'SKAYA, F.A.; GALUSHKINA, N.A.; GAVRILENKO, I.V.; GRAUERMAN, L.A.; IRODOV, M.V.; KARANTSEVICH, L.G.; KRZYSINA, R.A.; KUPCHINSKIY, P.D.; LEVIT, M.S.; LEONT'YEVSKIY, K.Ye.; LITVINENKO, V.P.; LYUBCHANSKAYA, Z.I.; MAZYUKEVICH, V.A.; MAN'KOVSKAYA, N.K.; NEVOLIN, F.V.; POGONKINA, N.I.; POPOV, K.S.; PREMET, G.K.; SARKISOVA, V.G.; SEMENOV, Ye.A.; STERLIN, B.Ya.; SERGEYEV, A.G., kand.tekhn.nauk, obshchiy red.; PRITYKINA, L.A., red.; TARASOVA, N.M., tekhn.red.

[Technical and chemical production control and accounting in the oils and fats industry] Tekhnokhimicheskii kontrol' i uchet proizvodstva v maslodobyvaiushchei i zhiopererabatyvaiushchei promyshlennosti. Moskva, Pishchepromizdat. Vol.1. 1958. 403 p.

(Oil industries)

(MIRA 13:1)

VISHNEPOL'SKAYA, P.K.

Storing oil cake before extraction. Masl.-zhir. prom. 23 no.9:10-12  
'57. (MIRA 10:12)

1.Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.  
(Oilseeds)

VISHNEPOL'SKAYA, F.A.; BEZUGLOV, I.Ye.

Refractometric determination of the concentration of miscella.  
Masl.-zhir. prom. 24 no.4:9-10 '58. (MIRA 11:5)

1.Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.  
(Refractometry) (Oils and fats)

VISHNEPOL'SKAYA, F.A.

Vegetable oil as an absorbent for benzine vapors. Masl.-zhir. prom.  
24 no.2:30-31 '58. (MIRA 11:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.  
(Sunflower seed oil) (Gasoline)

YERET'SKIY, M.; VISHNEPOL'SKIY, A.

Closer to reality and industry. Avt.transp. 38 no.7:45-46  
Jl '60. (MIRA 13:7)

1. Moskovskiy elektromekhanicheskiy tekhnikum.  
(Moscow--Automobile engineering--Study and teaching)

VISHNEPOL'SKIY, A.B.

The role of baroceptive systems of the nasal cavity on the regulation of respiration in mammals [with summary in English]  
Biul. eksp. biol. i med. 45 no. 4: 17-21 Ap '58 (MIRA 11:5)

1. Iz kafedry normal'noy fiziologii (zav. - prof. G.Ya. Khvoles) Karagandinskogo meditsinskogo instituta (dir. - dotsent P.M. Pospelov). Predstavlena deystvitel'naya chlenom AMN SSSR V.V. Parinym.

(RESPIRATION, physiology  
regulatory eff. of pressure-sensitive nerves in nasal cavity of dogs & rabbits (Rus))  
(NASAL CAVITY, innervation  
pressure-sensitive nerves, regulatory eff. on resp. in dogs & rabbits (Rus))



VISHNEVSKIY, A.B.

Pressure receptive systems of the nasal cavity and their significance in the physiology of respiration in frogs [with summary in English].  
Biul.eksp.biol. i med. 45 no.2:38-41 F'58. (MIRA 11:5)

1. Iz kafedry normal'noy fiziologii (zav. - prof. G.Ya. Khvoles) Karagandinskogo meditsinskogo instituta (dir. - dotsent P.M. Pospelov). Predstavlena deystvitel'nym chlenom AMN SSSR.V.N. Chernigovskim.

(NASAL CAVITY, physiology,

eff. of stimulation of baroceptive areas on resp. in frogs (Rus))

(RESPIRATION, physiology,

eff. of stimulation of nasal baroceptive areas in frogs (Rus))

LISITSKIY, Aleksey Afanas'yevich; TSEKHANOV, Aleksey Dmitriyevich;  
VISHNEPOL'SKIY, A.M., red.; GALAKTIONOVA, Ye.N., tekhn.red.

[Laboratory practical work in automobile repair] Labora-  
torny praktikum po remontu avtomobilei. Moskva, Nauchno-tekhn.  
izd-vo M-va avtomobil'nogo transporta i shosseinykh dorog RSFSR,  
1960. 98 p. (MIRA 13:11)  
(Motor vehicles--Maintenance and repair)

FEYGIN, L.A.; YAKOVLEV, Yu.M.; YERETSKIY, M.I.; VISHNEPOL'SKIY, A.M.;  
STANKOVSKIY, A.P., dotsent, nauchnyy red.; KROMOSHCH, I.L.,  
red.izd-va; RUDAKOVA, N.I., tekhn.red.

[Using building machinery and equipment] Eksploatatsia  
stroitel'nykh mashin i oborudovaniia. Moskva, Gos.izd-vo lit-ry  
po stroitel'stvu, arkhitekt. i stroit.materialam, 1960. 257 p.  
(MIRA 14:4)

(Building machinery)

VISHNEPOL'SKIY, B.D.

~~Modification of skin potentials in neurodermatitis, chronic urticaria  
eczema and psoriasis during health resort treatment. Vest. vener.  
no.2:10-11 Mar-Apr 1951. (CIML 20:9)~~

1. Senior Scientific Associate. 2. Of the Dermatological Clinic  
of the Ukrainian Scientific-Research Institute of Health Resort  
Therapy (Director--Docent A.N. Sokolov.).

VISHNEPOL'SKIY, S.A., kand. ekon. nauk; BAYEV, S.M., inzh. putey soob-  
shcheniya; BONDARENKO, V.S.; RODIN, Ye.D.; CHUVLEV, V.P.;  
TURETSKIY, L.S.; SMIRNOV, G.S.; SHAPIROVSKIY, D.B.; OBERMEYSTER,  
A.M.; SINITSIN, M.T.; KOGAN, N.D.; PETRUCHIK, V.A.; GRUNIN, A.G.;  
KOLESNIKOV, V.G.; MARTINOSOV, A.Ye.; KROTKIY, I.B. [deceased];  
ZENEVICH, G.B.; MEZENTSEV, G.A.; HOLOMOYTSEV, V.P., kand. tekhn. nauk;  
ZAMAKHOVSKAYA, A.G., kand. tekhn. nauk; MAKAL'SKIY, I.I., kand.  
ekon. nauk; MITROFANOV, V.F., kand. ekon. nauk; CHILIKIN, Ya.A.;  
BAKAYEV, V.G., doktor tekhn. nauk, red. Primalni uchastiye:  
DZHAVAD, Yu.Kh., red.; GUBERMAN, H.L., kand. ekon. nauk, red.;  
RYABCHIKOV, P.A., red.; YAVLENSKIY, S.D., red.; BAYRASHEVSKIY,  
A.M., kand. tekhn. nauk, red.; POLYUSHKIN, V.A., red.; BALANDIN,  
G.I., red.; ZOTOV, D.K., red.; RYZHOV, V.Ye., red.; BOL'SHAKOV, A.N.,  
red.; VUL'FSON, M.S., kand. ekon. nauk, red.; IMITRIYEV, V.I., kand.  
ekon. nauk, red.; ALEKSANDROV, L.A., red.; LAVRENOVA, N.B., tekhn.  
red.

[Transportation in the U.S.S.R.; marine transportation] Transport  
SSSR; morskoi transport. Moskva, Izd-vo "Morskoi transport,"  
1961. 759 p. (MIRA 15:2)

(Merchant marine)

OSTROVSKIY, A.D.; LOGINOV, A.A.; VISHNEPOL'SKIY, S.B.

Prevention of staphylococcal diseases in mothers and newborn  
infants by means of immunization with purified sorbed  
staphylococcal anatoxin. Zhur.mikrobiol., epid. i imm. 42  
no.12:52-56 D '65. (MIRA 19:1)

1. Arkhangel'skiy institut epidemiologii, mikrobiologii i  
gigiyeny, Arkhangel'skaya gorodskaya bcl'nitsa No.9 i Institut  
epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.

VISHNEREVSKIY, A. (Leningrad).

Boxes for drawing out metal fragments from cotton. Pozh.delo 3  
no.8:6 Ag '57. (MLRA 10:8)  
(Cotton spinning--Safety measures)

VISHNEV, I. P.

"Effect of vapor-content on heat-transfer in boiling in tubes."

Report presented at the 1st All-Union Conference on Heat- and Mass- Exchange,  
Minsk, BSSE, 5-9 June 1961



VISHNEV, I. P.; YELUCHIN, N. K.; MAZSYEV, E. P.

"Heat transfer to boiling liquids in pipes under vibrating conditions."

paper submitted for 2nd All-Union Conf on Heat and Mass Transfer, Minsk, 4-12  
May 1964.

All-Union Sci & Res Inst for Oxygen Apparatus, Moscow.

26.5400

S/124/62/000/004/018/030  
D251/D301

AUTHOR: Vishnev, I. P.

TITLE: Heat exchange with ebullition of liquefied gases in pipes

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 4, 1962, 91-92, abstract 4B603 (Dostizh. i zadachi v prioz-ve i prime-nii kholoda v narodn. kh-ve SSSR, M., 1960, 47-55)

TEXT: A study is made of the ebullition of liquid  $O_2$  in vertical copper pipes of internal diameter  $d = 4 - 9.9$  mm, and length  $l = 340 - 5060$  mm ( $l/d = 45 - 650$ ) with thermal loads  $q = 100 - 50,000$  kcal/m<sup>2</sup>hour, with volumetric vapor content  $0 - 99.9\%$  and apparent liquid level  $h = 0.26 - 0.98$ . Within fixed limits of  $h$ , on lowering the liquid level the coefficient of heat-exchange with ebullition  $\alpha_{ebull}$  increases, and the greatest intensity of heat-exchange takes place with minimum velocity of the liquid on entrance into the pipe; for  $l/d > 500$  the effect on the heat-exchange disappears. The experi-  
Card 1/2

Heat exchange with ...

S/124/62/000/004/012/030  
D251/D301

mental data, obtained for all the pipes tested, are described by the criteria equation  $N = 0.0376P^{0.35}R_x^{0.7}h^{-m}$ , where  $R_x = 4q(1/d)^{0.65} [\sigma / (\rho_{liq} - \rho_{vap})]^{0.5} / r \rho_{vap} \nu$ ;  $\sigma$  is the surface tension at the boundary liquid vapor,  $\rho_{liq}$  and  $\nu$  are the density, latent heat of vaporization and kinematic viscosity of the liquid,  $\rho_{vap}$  is the density of the vapor,

$$m = 2900(1/d)^{-1.65} 10^{-1} g [29000(1/d)^{-1.65}] g / 0.1 q_{cr}$$

$q_{cr}$  is the critical thermal load for transition from a bubbling to a film regime of ebullition in a large volume of the liquid. [Abstracter's note: Complete translation.]

Card 2/2

35753

S/124/62/000/003/031/052

D237/D302

26.5400

AUTHORS: Vishnev, I.P., and Yelukhin, N.K.

TITLE: Heat transfer on the boiling of liquefied gases in tubes using dimensionless coordinates

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 3, 1962, 96-97, abstract 3B611 (Tr. Vses. n-i in-ta kislородn. mashinotr., 1960, no. 3, 85 - 102)

TEXT: Investigation of the process of boiling of oxygen freely circulating under atmospheric pressure in a vertical tube, experimental apparatus and method are described. The mechanism of boiling and the motion of the fluid-vapor mixture in the tube, are described in detail. An empirical equation for the heat transfer coefficient is given in a dimensionless form. 12 references. [Abstractor's note: Complete translation].

X

Card 1/1


POBEGAYLO, V.M., mladshiy nauchnyy sotrudnik; GLUKHEN'KIY, B.T., mladshiy  
nauchnyy sotrudnik; VISHNEVKIN, M.S., ordinator

Treatment of gonorrheal urethritis with levomycetin. Vest. ven. i  
derm. no.3:58 My-Je '56. (MLRA 9:9)

1. Iz L'vovskogo koshno-venerologicheskogo instituta.  
(GONORRHEA) (CHLOROMYCETIN)

VISHNEVETSKAYA, GRIGOR'YEV, and SVET-MOLDAVSKIY, G. Ya.

"Results of the Experimental Study of Epidemic Hepatitis and Directions of Further Work," a report discussed at one of six meetings of the Virological Section, Moscow Dept. All-Union Society of Microbiologists, Epidemiologists, and Infectionists imeni I.I. Mechnikov in 1955. Voprosy Virusologii, 1, No 2, 1956

  
Sum. 1003, 20 Jul 56

VISHNEVAKAYA, S.M.; SHEVCHUK, M.K.; KRAMARENKO, D.P.; KHVALIBOVA, E.I.;  
MUKVOZ, L.G.; GUREVICH, Ye.P.; KORNIYENKO, Ye.I.; POTEYEVA, N.A.;  
PISARENKO, Ye.I.; LOY, D.D.; KORABLEV, N.G.; GELLER, I.Yu.

Epidemiology and prevention of helminth infections in the zone  
affected by the construction of Kakhovska reservoir and hydro-  
electric station and the Upper-Ingulets Canal. Med.paraz. i paraz.  
bol. 25 no.2:121-127 Ap-Je '56. (MLRA 9:8)

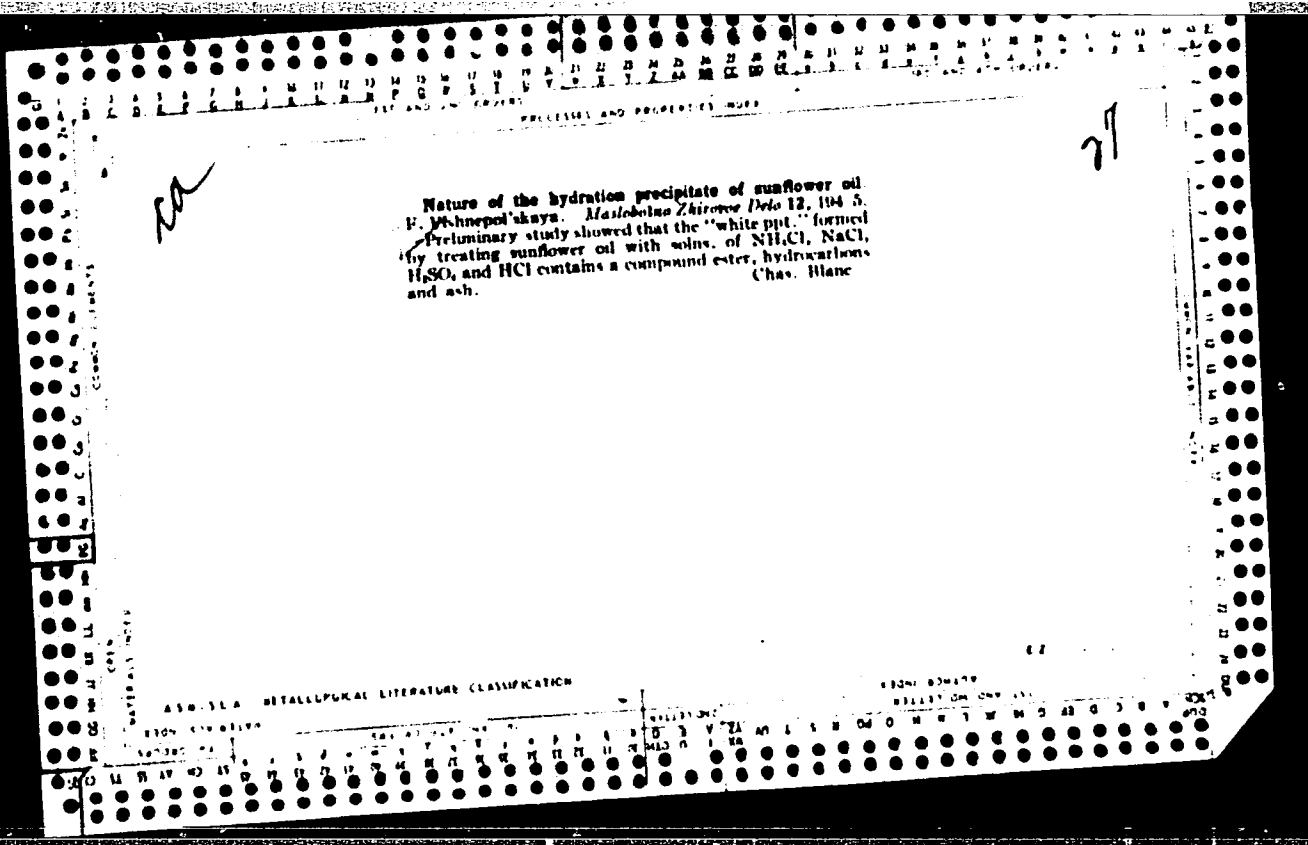
1. Iz gel'mintologicheskogo otdeleniya Instituta malyarii i meditsin-  
skoy parazitologii imeni prof. V.Ya.Rubashkina Ministerstva zdravo-  
okhraneniya Ukrainskoy SSR (dir. instituta I.A.Demchenko, zav.  
otdeleniyem - prof. Ye.S.Shul'man) i Dnepropetrovskoy Zaporozhskoy,  
Khersonskoy, Nikolayevskoy oblastnykh sanitarno-epidemiologicheskikh  
stantsiy.

(HELMINTH INFECTIONS, prev. and control  
in Russia, eff. of reservoir & canal constructions)

VISHNEPOL'SKIY, S.S.

~~MA-REDACTED~~  
For specialization in general construction trusts. Gor.khoz.Mosk. 25 no.10:  
25-26 0 '51. (MLRA 6:11)  
(Construction industry)





SA

1153  
+

337.391.1

8814. On the disintegration of particles generating electro-nuclear showers. S. A. AZIMOV, V. F. VISHNEVSKI AND N. I. KHILKO. *Dokl. Akad. Nauk, SSSR*, 78 (No. 2) 231-4 (1951) in Russian.

The following absorption lengths of the particles were obtained: water  $170 \pm 10$  g/cm<sup>2</sup>, air  $123 \pm 6$  g/cm<sup>2</sup>. The former value was obtained by lowering a counter system 6 m into a lake at 3900 m altitude. The difference is interpreted in terms of  $\pi$ -mesons.

B. F. GEORGE

ASB.3L3 METALLURGICAL LITERATURE CLASSIFICATION

24 (8)

## AUTHORS:

Melukhin, N. K., Candidate of Technical Sciences, Vishnev, I. P., Engineer SOV/67-59-4-2/19

## TITLE:

Heat Exchange in the Boiling of Oxygen in Tubes

## PERIODICAL:

Kislород, 1959, Nr 4, pp 5-15 (USSR)

## ABSTRACT:

For the purpose of a rational construction of air-fractionation plants it was necessary to investigate carefully the processes taking place with liquid oxygen boiling in vaporization tubes. Experiments were made with copper tubes, as are used in large technical plants, at atmospheric pressure and natural circulation. Heat supply  $q$  was in the range between 100 and 50000 kcal/m<sup>2</sup> per hour. The steam content in the tubes was varied from 0 to 99% and more, and so were the apparent levels  $h$  ( $h$  is  $H/l$ ,  $H$  denoting the immersion depth of tube into liquid, and  $l$  the tube length), and the ratio  $l/d$  of the tube ( $d$  denoting the inner tube diameter). Investigations proved that, when boiling oxygen in vertical tubes, heat exchange is strongly influenced both by ratio  $l/d$  (assuming  $l/d > 80$ ) and by  $H/l$ . Observation of the boiling process itself showed that heat exchange occurs most favorably when the stage of steam bubble formation in the liquid is surpassed, and there is a

Card 1/2

Heat Exchange in the Boiling of Oxygen in Tubes

SOV/67-59-4-2/19

continuous steam flow along the tube. In this case, there is but an extremely thin liquid layer left on the tube walls, which is swept on into fast motion by the steam. Such a propagation of the liquid surface is the best condition for rapid vaporization. It was recognized that all of the factors exerting an influence on the heat exchange are clearly defined by the velocity of the steam exit from the tube. Interpretation of experimental results obtained further led to a quantitative description of the heat transfer when boiling liquids in tubes, under natural circulation. Three equations were set up for the calculation of the heat transfer in the process described. There are 14 figures, 1 table, and 13 references, 10 of which are Soviet.

Card 2/2

VISHNEV, I. P., Cand Tech Sci (diss) -- "Investigation of thermal emission in the boiling of oxygen, nitrogen, and a mixture of them in tubes". Moscow, 1959. 16 pp (Min Higher and Inter Spec Educ RSFSR, Moscow Inst of Chem Machinebuilding), 220 copies (KL, No 9, 1960, 124)

VISHNEV, I.P., inzh.; YELUKHIN, N.K., kand.tekhn.nauk

Heat transfer during the boiling of liquefied gases in pipes  
and its treatment in terms of dimensionless coordinates. Trudy  
VNIIMASH no.3:85-102 '60. (MIRA 13:9)  
(Heat--Transmission) (Liquefied gases)

82591

S/170/60/003/005/007/017  
B012/B056

24.5200

AUTHORS: Vishnev, I. P., Yelukhin, N. K.

TITLE: The Problem of Heat Exchange<sup>1</sup> in the Boiling of Liquids in Tubes

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, 1960, Vol. 3, No. 5,  
pp. 74 - 80

TEXT: In the present paper, the boiling of oxygen, nitrogen, and a mixture of both in perpendicularly arranged tubes in the case of natural circulation and under atmospheric pressure is investigated. In these experiments, the total tube surface on which heat exchange occurred was moistened with the liquid. The experiments were carried out under "optimum" conditions, i.e., during boiling along the entire tube as well as in the case of such modes of operation in which the zone of preheating exerted influence. It was found that the exponent in the empirical formula  $\alpha_k = A q^n$  varies from 0.16 to 0.64 in the boiling of oxygen in tubes with natural liquid-circulation. On the basis of the experiments

Card 1/4

82591

The Problem of Heat Exchange in the Boiling of Liquids in Tubes S/170/60/003/005/007/017  
B012/B056

of heat exchange in the boiling of oxygen in tubes of  $l/d = 106$  to  $560$ , which were carried out here in the case of thermal stresses of  $100$  to  $50,000 \text{ kcal/m}^2 \cdot \text{hr}$ ,  $h = 0.9$ , and at atmospheric pressure, formula (1) is recommended for the heat exchange coefficient  $\alpha_k$ .  $q$  - specific thermal stress,  $l$  - tube length,  $d$  - tube diameter,  $h = H/l$ ,  $H$  - liquid level. Experimental data obtained by Rachko, Kutateladze, Vishnev, Tananayko, Danilova and Mazyukevich, Rabinson and Katts, Ratiani, Ivanov, Korneyev, Minchenko, Borishanskiy, Mak-Adams, Nukiyam, and Kichelli are given in Fig. 2. These data are in agreement with the straight line shown in the same figure and calculated from formula (1). It is pointed out that formula (1), in comparison to the empirical formula  $\alpha_k = Aq^n$ , offers an advantage in-so-far as in the latter the coefficient  $A$  varies considerably for different liquids and mixtures, and as, besides, this empirical formula does not reproduce the influence exerted by the geometric dimensions of the surface during boiling in tubes. For this reason, the output of heat in the boiling of a liquid can be calculated from the formulas derived for a large volume only in the case of tubes with  $l/d \leq 80$

Card 2/4



82591

The Problem of Heat Exchange in the Boiling of Liquids in Tubes S/170/60/003/005/007/017  
B012/B056

(at  $h > 0.7$ ). In the case of boiling in tubes of  $l/d > 80$ , the influence exerted by the tube dimensions must be taken into account. On the basis of the experimental results given here, and in consideration of the model test method suggested by Professor A. A. Gukhman, formula (2) is recommended. It expresses the heat exchange in the boiling of a liquid in tubes in the case of natural circulation. The experimental data given here further show that as a determining quantity in the boiling of a liquid in tubes, not the rate of vapor development, but the flow rate of the vapors may be taken. In that case,  $Re^* l/d$  in formula (2) may be replaced by  $Re^{**} - Re^* l/d$ . It is pointed out that the introduction of the numbers  $Re^{**}$  and  $h$  makes it possible to characterize the influence exerted by the hydrodynamics of the system more completely. Both numbers together take account of the change in the molar and molecular heat transfers in boiling which is due to the change in the rate and thickness of the underlying laminar layer. Fig. 3 shows the evaluation of experimental data on the boiling of oxygen. Formula (6) obtained from these results is written down. Professor A. A. Gukhman displayed interest in the present investigation. There are 3 figures, 1 table, and 7 references: 6 Soviet and 1 German.

Card 3/4

82591

The Problem of Heat Exchange in the Boiling of Liquids in Tubes S/170/60/003/005/001/017  
B012/R056

ASSOCIATION: Institut kislородnogo mashinostroyeniya, g. Moskva  
(Institute of Oxygen Machine Construction, Moscow)

✓

Card 4/4

YISHNEV, I. P., and YELUKHIN, N. I.

"On the Effect of Vapour Content on Heat Transfer at  
Boiling in Tubes."

Report submitted for the Conference on Heat and Mass Transfer,  
Minsk, BSSR, June 1961.

VISHNEV, I. P.; YELUKHIN, N. K.; MAZAYEV, B. B.

"Heat transfer in boiling of a liquefied gas in pipes under vibration conditions."

report submitted for 2nd All-Union Conf on Heat & Mass Transfer, Minsk, 4-12 May 1964.

All-Union Sci Res Inst Oxygen Engineering.

*VISHNEVAYA*

BALASHOV, A.I.; VISHNEV, L.A.; KARASEV, K.A.

Training rooms for crane operators. Besop.truda v prom. 1  
no.7:33-34 J1 '57. (MIRA, 10:7)

1. Kolomenskiy teplovozostroitel'nyy zavod im. V.V. Kuybysheva.  
(Cranes, derricks, etc.)

VISHNEV, P. (g. Kuybyshev)

~~Pensioners as active workers. Okh. truda i sots. strakh. no.6:74~~  
Ja '59. (MIRA 12:10)

(Kuybyshev--Pensioners)

BAADE, Frits [Beade, Fritz], prof.; BATSANOVA, N.A. [translator]; FOMIN, B.S. [translator]; VISHNEV, S.M., red.; LEBEDINSKAYA, L.N., red.; KHOMYAKOV, A.D., tekhn.red.

[World power engineering; nuclear power - now or in the future?]  
Mirovoe energeticheskoe khoziasitvo; atomnaia energiya - seichas ili v budushchem? Moskva, Izd-vo inostr.lit-ry, 1960. 247 p.  
Translated from the German. (MIRA 13:12)  
(Power resources)

S. M. WASSILY, A. M. TIRASHEV

"Non-Ferrous and Rare Metals in the War Preparations of the Capitalist Nations."  
Reviewed by Tirashev, A. M. Sovet. Met., 11, No. 4-6, 1951.

Report U-1506, 4 Oct. 1951.



VIGINEV, V.

Rabota Dobroleta za 1929. [The work of the Volunteer Air Force for 1929].  
(Samolot, 1930, no. 1, p. 40-42).

DIC: TL504.325

30: Soviet Transportation and Communications, A Bibliography, Library of Congress  
Reference Department, Washington, 1952, Unclassified

VISHNEV, V.

Blizhaishie zadachi vozdushnogo soobshcheniia. [Next problems of air communications] (Samolet, 1924, no. 12, p. 10-13, map).

DLC: TL504.S25

Iz opyta nashikh vozdushnykh linii. [From the experience of our air lines] (Vestnik vozdushnogo flota, 1928, no. 8, p. 34-36).

DLC: TL504.V45

Vozdushnye soobshcheniia v SSSR. [Air communications of the USSR]. (Samolet, 1926, no.2, p. 33-34; no. 12, p. 10-13, illus., map).

DLC: TL504.S25

Vozdushnyi transport. [Air transport] (Tekhnicheskaiia ents., v. 4, p. 241-251).

DLC: T9.T4

Vozdushnye soobshcheniia. [Air communications] (Prilozhenie k zhurnalu "Khronika vozdushnogo dela", 1930, no. 11-12).

DLC: TL504.K5

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress, Reference Department, Washington, 1952, Unclassified.

VISHNEV, V. M.

Puti udeshevleniia vozdušnogo transporta. [The ways of reducing the cost of air transport]. (Samolet, 1930, no. 10, p.25-26; no. 11, p. 12-13 and no. 12, p. 9-11; 1931, no. 2, p. 10-12, maps).

DLC: TL504.S25

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress, Reference Department, Washington, 1952, Unclassified.

VISHNEV, V. M.

USSR/Miscellaneous - Foundry processes

Card 1/1 : Pub. 61 - 20/23

Authors : Vishnev, V. M.

Title : Formless moulding

Periodical : Lit. proizv. 4, page 30, July 1954

Abstract : A method for formless moulding of individual parts is briefly described. Illustration.

Institution : ...

Submitted : ...

VISHNEV, V.M.

Making molds without patterns. Lit. proisv. no. 4:30 J1 '54.  
(Founding) (MLRA 7:7)

VISHNEVA, A.P.

Letters to the editor. Khleb.i kond.prom. 6 no.6:45 Ja '62.  
(MIRA 15:7)

1. Cheboksarskiy khlebozavod No.1.  
(Bakers and bakeries)

VISHNEVA, M.

Hairdressers strive for the title of shock workers of communist labor. Zhil.-kom. khoz. 10 no.11:25-26 '60. (MIRA 13:11)

1. Predsedatel' gruppkoma tresta parikmakherskogo khozyaystva g.Sverdlovska.

(Sverdlovsk--Hairdressing)

ZARYVAYSKAYA, Kh. [Zaryvais'ka, Kh.], kand.med.nauk; GOYEVSKAYA, V.  
[Haievs'ka, V.], vrach.; SHEYKINA, Ye., vrach.; VISHNEVA, P.,  
vrach

Results of hygiene tests of hot-air heating systems with natural  
stimulation. Bud.mat.i konstr. no.5:61-62 S-0 '62. (MIRA 15:11)  
(Hot-air heating)



VISHNEVECKY, Z.D.,  
M.F. SICHIKOV, Engineers Digest, v. 10, Feb. 1949, p.  
46.





