

BIESTEK, Tadeusz, mgr.inz.; GAWUC, Wladyslaw, mgr inz.; HARASIMOWICZ,  
Edward, mgr.inz.

Tropicalization of industrial equipment. Przegl. mech. 22  
no. 20123-631 25 0'63

1. Instytut Mechaniki Precyzyjnej, Warszawa (for Biestek).
2. Instytut Elektrotechniki, Warszawa (for Gawuc and Harasimowicz).

BIESTEK, Tadeusz

Resistances of chemically and electrochemically passivated silver coatings to accelerated tarnishing. Inst mech precyz 11 no. 42: 23-40 '63.

BIESTEK, Tadeusz

Correlation coefficients for results of accelerated laboratory  
and field corrosion tests of electroplated zinc and cadmium  
coatings. Inst mech precyz 12 no.46:1-17 '64

BILFIZAD, C.

"Psychological Experience in Parachute Jumps", Spalochroniarz, P. 14,  
(SKRZYDLATA POLSKA, Vol. 10, No. 44, October 1954, Warsaw, Poland)

SO: Monthly List of East European Accessions (FEAL), LC, Vol. 4, No. 3,  
March 1955, Uncl.

BIESZCZAD, C.

We are waiting for the SW-2, p. 12. (SKRZYDLATA POLSKA, Warszawa, Vol. 11, no. 3, Jan. 1955.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 8, No. 1, Jan. 1955, Uncl.

BIETIECHTIN A.G.

Podstawy mineralogii (Foundations of mineralogy)

SO: Nowe Książki #1, Jan 56, Uncl.

DIETRY, L.

YUGOSLAVIA / Laboratory Equipment, Apparatus, Their Theory, Construction and Application. F

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 60744.

Author : L. Bietry.

Inst :

Title : Upon the Method of Double Weighing.

Orig Pub: Kemija u industriji, 1957, 6, No 12, 377-380.

Abstract: It is shown that the principle, on which Gauss's method of double weighing is based, brings to Mendeleev's method (weighing with a constant load on the balance). The influence of friction, temperature, etc. is studied. The greatest accuracy is attained by using balances of special construction with counterweights.

Card 1/1

**BIEZANSKI, W.**

**Effect of calcium on acetylcholine content of nerve fibers. Acta  
physiol. polon. 3 no. 3:247-258 1952. (CLML 23:5)**

**1. Of the Institute of Human Physiology (Head--Prof. Fr. Czubalski,  
M. D.) of Warsaw Medical Academy.**



BOCERYK, Barbara; BIEZANSKI, Wieslaw

Therapeutic value of new anti-myasthenia drugs according to clinical and electromyographic aspects. *Neur. &c. polska* 9 no.4:471-483 J1-Ag '59.

1. Z Kliniki Chorob Nerwowych A.M. w Warszawie p.o. Kierownika: prof. dr I. Hausmanowa-Petrusewicz i z Kliniki Ortopedycznej A.M. w Warszawie Kierownik: prof. dr A. Gruca.  
(PARASYMPATHOMIMETICS ther)  
(MUSCLE RELAXANTS ther)  
(MYASTHENIA GRAVIS ther)

BIALECKI, Stanislaw; BIEZANSKI, Wieslaw; GAWLIK, Zbigniew

Radiological, anatomic-pathological and biochemical changes in the femoral heads with deforming changes. Chir.narz.ruchu ortop. polska 24 no.6:529-536 '59.

1. Z Kliniki Ortopedycznej AM w Warszawie. Kierownik: prof.dr A. Graca. Z Zakładu Anatomii Patologicznej AM w Warszawie. Kierownik: prof.dr J. Dabrowska.  
(FEMUR HEAD pathol.)

BIEZANSKI, Wieslaw; JAWORSKA, Mieczyslawa

Diagnostic and therapeutic problems in progressive muscular dystrophy.  
Chir. narz.ruchu ortop. polska 26 no.3:243-252 '61.

1. Z Kliniki Ortopedycznej AM w Warszawie Kierownik: prof. dr.  
A. Gruca.

(MUSCULAR DYSTROPHY)

BIEZANSKI, Wieslaw; BARTOSIEWICZ, Waclaw

Levels of calcium, phosphorus and basic phosphatase in the blood serum of orthopedic patients treated with ossopan. Chir.narz.ruchu ortop. polska 26 no.4:353-363 '61.

1. Z Kliniki Ortopedycznej AM w Warszawie Kierownik: prof. dr A. Gruca.

(FRACTURES ther) (BONE AND BONES)  
(CALCIUM blood) (PHOSPHATES blood) (PHOSPHATASES blood)

BLEZANSKI, Wieslaw; GRUCA, Adam

Physiological principles of the mobilization of amputation stumps.  
Chir. narz. ruchu ortop. polska 26 no.6:759-763 '61.

1. Z Kliniki Ortopedycznej AM w Warszawie Kierownik: prof. dr A.Gruca.  
(AMPUTATION STUMP surg)

BURKACKA, Halina; BIEZANSKI, Wieslaw

The problem of therapeutic gymnastics in conservative therapy of scoliosis. Chir. narsad. ruchu ortop. pól. 27 no.3:367-373 '62.

1. Z Kliniki Ortopedycznej AM w Warszawie Kierownik: prof. dr A. Gruca.  
(SCOLIOSIS) (EXERCISE THERAPY)

BIEZANSKI, Wieslaw

Result of the treatment of arthrosis deformans with Rumalon.  
Chir. narzad. ruchu ortop. pol. 28 no.6:609-614 '63.

1. Z Kliniki Ortopedycznej AM w Warszawie. Kierownik: prof.  
dr. A. Graca.

\*

BIEZANSKI, Wieslaw; TLUCHOWSKI, Witold

Value of electrodiagnostic investigations in peripheral paralysis of the facial nerve. Otolaryng. Pol. 19 no.3: 325-330 '65.

1. Z Kliniki Ortopedycznej AM w Warszawie (Kierownik: prof. dr. A. Gruca) i z Oddziału Foniatrycznego Kliniki Laryngologicznej AM w Warszawie (Kierownik: prof. dr. A. Mitrinowicz-Modrzejewska).



BIEZIN', A.P. [Biezins, A.], prof.; LISHNEVSKIY, S.M., prof.;  
PETUKHOVA, L.I., doktor med.nauk; LENTSBERG, K.Ya. [Lencbergs, K.],  
dotsent; SEGLIN', T.Ya. [Seglins, T.]; SKUDRA, A.Ya.;  
LIYEPIN', Kh. [Liepins, H.]

Posture disorders and scoliosis in children. Ortop., travm.  
i protez. 26 no.12:74-76 D '65.

(MIRA 19:1)

1. Iz Rihzskogo instituta travmatologii i ortopedii. Adresa avtorov:  
Riga 5, ul. Dunties, d.16/22, Institut travmatologii i ortopedii.  
Submitted July 30, 1965.

BIEZUNSKA-MALOWISTOWA, Izabela

The 10th International Congress of Papyrologists; Warsaw-Cracow,  
September 3 - 9, 1961. Nauka polska 10 no.2:153-157 '62.

1. Uniwersytet, Warszawa

BIFFL, M

Methodics of the coagulation processes. XIV. Simultaneous coagulation of the mixed systems of silver halides, silver cyanide, and silver thiocyanate by univalent counterions. M. Bili and B. Tejak (Univ. Zagreb, Yugoslavia). *Croat. Chem. Acta* 30, 9-14 (1958) (in English); cf. *C.A.* 50, 16272a. Coagulation of mixed slightly sol. Ag salts in presence of KNO<sub>3</sub> was followed by a tyndallometric technique (*C.A.* 46, 1842a). The sol concn., detd. by the concn. of AgNO<sub>3</sub> in reacting mixts., was const. at  $2 \times 10^{-3} M$ . The concn. of the component that made a more sol. ppt. with Ag (KCl or KBr, resp.) also was const. ( $2 \times 10^{-2} M$ ) in order to avoid the effect of changing the concn. of stabilizing ion. Series were prepd. within each system with different concns. ( $0-2 \times 10^{-3} M$ ) of the component that made a less sol. ppt. with Ag. The concn. of counterions (K<sup>+</sup>) varied within such a particular series, taking into consideration the concn. of K<sup>+</sup> ions both in neutral electrolyte (KNO<sub>3</sub>) and in the reacting components. The concn. gradient of counterions was extended on both sides of the coagulation value. The crit. time of coagulation was 10 min., except in the case of AgCl-AgSCN where it was 1 min. The temp. was 20°. In the system AgNO<sub>3</sub>-KCl-KBr-KNO<sub>3</sub>, small addn. of Br<sup>-</sup> to the pure chloride system did not change the coagulation value of KNO<sub>3</sub> until the concn. of Br<sup>-</sup> became

equal to the concn. of Ag<sup>+</sup> when it suddenly shifted to the coagulation value of the pure AgBr. Similar results were obtained in the systems AgNO<sub>3</sub>-KCl-KI-KNO<sub>3</sub> and AgNO<sub>3</sub>-KCl-KCN-KNO<sub>3</sub>. This indicates the original and entire pptn. of less sol. component (AgBr, AgI, and AgCN, resp.). When there are insufficient Br, I, or CN ions to react with all Ag<sup>+</sup> ions, chloride ions participate in building up the crystal lattice and stabilize the particles. After the equality of the concns. of Ag<sup>+</sup> and Br<sup>-</sup> (I<sup>-</sup> or CN<sup>-</sup>, resp.) is reached there are still enough of these anions in soln. even for the stabilization of particles and the coagulation value changes to that of pure AgBr (AgI or AgCN, resp.). In the system AgNO<sub>3</sub>-KCl-KSCN-KNO<sub>3</sub>, small addn. of SCN<sup>-</sup> to the pure chloride system greatly reduced its turbidity. Further addn. increased it again and the coagulation curve gradually acquired thiocyanate character, which was still not reached, however, at the concn. of SCN<sup>-</sup> equal to that of Ag<sup>+</sup>. In the system AgNO<sub>3</sub>-KBr-KI-KNO<sub>3</sub>, addn. of I<sup>-</sup> to pure bromide system gradually shifted the coagulation value toward that of the pure AgI. The behavior of the last 2 systems indicates simultaneous pptn. of both components, presumably in the form of mixed crystals.

J. Kratochvíl

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101677 D. dr.

BLAGOJEVIC, M., dr.; KOVACEVIC, D., dr.; BIGA, S., dr.; VASOVIC, M., dr.

The effect of aureomycin ointment on the clinical picture of trachoma; experiences in antitrachoma dispensary in Padinska Skela. Med. glasn. 8 no.5:173-175 May 54.

1. Klinika za ocne bolesti Medicinskog fakulteta u Beogradu (upravnik prof. dr. Djordje Nasic)  
(TRACHOMA, ther. aureomycin, ointment)  
(AUREOMYCIN, ther. use trachoma, ointment)

BIGA, Sofija, M. dr.

Keratitis in the course of malignant lymphogranulomatosis. Srpski  
arh. celok. lek. 82 no.5:654-658 My '54.

1. Klinika za ocne bolesti Medicinskog fakulteta u Beogradu; upravnik:  
prof. dr. Djordje Mesic. (Rad je Urednistvo primilo 7.I.1954 god.)

(KERATITIS, compl.

\*Hodgkin's dis.)

(HODGKIN'S DISEASE, compl.

\*keratitis)

BIGA, Sofija

Bilateral occlusion of the central artery of retina during essential hypertension. Srpski arh. celok. lek. 84 no.4: 532-536 Apr 56.

1. Klinika za ocne bolesti Medicinskog fakulteta u Beogradu.  
Vd. upravnika: Ivan Stankovic.

(RETINA, blood supply

central artery occlusion, bilateral, in essential hypertension (Ser))

(HYPERTENSION, compl.

bilateral occlusion of central retinal artery (Ser))

STANKOVIC, Ivan, dr. prof.; BIGA, Sofija

Acute keratoconus. Srpski arh. celok. lek. 88 no.12:1173-1182 D '60.

1. Klinika za bolesti ociju Medicinskog fakulteta Universiteta u Beogradu. V.d. upravnika: prof. dr Ivan Stankovic.

(KERATOCONUS)

HARISLJAKES, S. (Beograd); BIGA, S. (Beograd)

Isolation of viruses from one inclusion blennorrhoea and one trachoma patient by inoculation into the amniotic cavity of the embryonated hen's eggs. Acta med. iugosl. 17 no.2:123-132 '63.

S



YUGOSLAVIA

SIGA, Sofija, Clinic for Eye Diseases (Klinika za Očne Bolesti), Faculty of Medicine (Medicinski Fakultet), Belgrade.

"Causes of Blindness in Residents of the Institute for Blind Children and Young People, Zemun."

Belgrade, Srpski Arhiv za Celokupno Lekarstvo, Vol 90, No 12, December 1962, pp 1203-1208.

Abstract: Author's German summary The author compares the results of an ophthalmological survey of 150 out of 153 inhabitants of an institution for blind children and young people with the results of similar investigations in Yugoslavia and elsewhere. In common with the findings of world scientific literature, the author reports that accidents and hereditary degeneration are on the rise as causes of blindness and that infections are on the decline as a cause. References to Yugoslav studies.

L/1

BIGA, Sofija

Ocular changes in mongolism. Srpski arh. celok. lek. 42 no.1:  
57-62 Ja '64

1. Očna klinika Medicinskog fakulteta Univerziteta u Beogradu  
(Upravnik: prof. dr. Ivan Stanković).

PACALOWSKI, Janusz, mgr inz.; BIGAJ, Jozef, mgr inz.

Bronze B 476 as alternate for bronze B 555 and bronze  
B 663. Rudy i metale 8 no. 5: 171-177 My '63.

PASTOROVA, Jana; BALAS, Vladimir; BIGANOVSKY, Mojmir; JUNGER, Ladislav;  
LUKESOVA, Tamara; VIACH, Vladimir

Importance of open intracranial injuries with regard to mortality &  
loss of working ability. Rozhl. chir. 38 no.6:373-380 June 59

I. I. chirurgicka klinika v Praze, prednosta prof. dr. J. Pavrovsky  
Neurologicka klinika v Praze, prednosta akademik prof. dr. K. Henner.  
(BRAIN, wds. & inj.)  
(DISABILITY EVALUATION)

BIGASHEV, A., polkovnik, kand. istoricheskikh nauk

Communism and nations. Komm. Vooruzh. Sil 46 no.6:

34-41 Mr '65.

(MIRA 18:11)

ASKAROV, F.A.; BIGAYEVA, A.R.

Geological time of magmatic processes in the Kyzyl Kum. Uzb. geol.  
zhur. 9 no.4:54-63 '65. (MIRA 18:9)

1. Institut geologii i geofiziki im. Kh.M.Abdullayeva AN UzSSR.

BIGDA, Ludmila, mgr.; BIGDA, Czeslaw, mgr

Magnetic method of crack detecting tests of weldings. Przegl  
mech 23 no.15:430-433 10 Ag '64

1. Dolmel, Lower Silesian Electric Machine Works, Wroclaw.

BIGDA, Ludmila, mgr.; BIGDA, Czeslaw, mgr

Magnetic method of crack detecting tests of weldings. Przegl  
mech 23 no.15:430-433 10 Ag '64

1. Dolmel, Lower Silesian Electric Machine Works, Wroclaw.



BIGDASH, S.A., podpolkovnik

The "Atlas" rocket; material from the foreign press. Vest.  
protivovozd. obor. no. 2:27-31 F '61. (MIRA 14:2)  
(United States—Intercontinental ballistic missiles)

KENEDI, Istvan; BIGE, Geza

Diurnal changes of the irregular electrocardiogram. Magy. belorv. arch.  
11 no.2-3:70-74 Apr-June 58.

1. A Magyar Nephaldsereg Egesszegugyi Szolgalatanak kozlomenye.  
(ELECTROCARDIOGRAPHY  
diurnal changes of irregular electrocardiograms (Hun))  
(PERIODICITY  
same)

TROMBITAS, Jozsef, dr.; BICE, Imre, dr.; NICOARA, Ioan, dr.

Data on the problem of cervical erosion and trichomonal vaginitis.  
Magy.noorv.lap. 26 no.5:307-312 8 '63.

1. M<sup>o</sup>rosvasarhelyi Orvostudományi és Gyógyszerészeti Intézet Szülészeti  
-Nagygyógyászat Klinika (vezető: Lovincz Ernő Andras prof., as orvos-  
tudományok doktora).

BIGEA, C.

For a continuous development of the invention and innovation movement in road, naval, and aerial transportation. P 229.

REVISTA TRANSPORTURILOR. (Asociatia Stinitifica a Inginerilor si Technicienilor din Romania si Ministerul Transporturilor Rutiere, Navale si Aeriene) Bucuresti, Romania. Vol. 6, no. 6, June 1959.

Monthly List of East European Accessions (EEAI) LC. Vol. 8, no. 9, Sept. 1959.

Uncl.

BIGEYEV, A. M.

Oct 48

USSR/Metals

Steel ingots

Metallurgy, Ferrous

"Influence of Gas Evclution on the Formation of a 6.5-Ton Ingot From Boiling Steel,"  
Docent A. A. Bezdenezhnykh, V. F. Agapov, A. M. Bigeyev, I. A. Tkachenko, V. M.  
Mitryukovskiy, A. L. Kushnarev, Engineers, Magnitogorsk Mining Metal Inst, 7 pp

"Stal'" No 10

Use of new method for collecting gases evolved from a solidifying boiling steel ingot (under positive pressure) indicated inaccuracy of vast majority of results of foreign researchers, who worked with a vacuum and extracted gases from metal and fettling simultaneously, using containers for taking samples. Main constituent of gases evolved is carbon monoxide (90%), not hydrogen. Vigorous boiling of the metal in the mold causes vertical circulation, which improves ingot structure. Manganese has considerable effect on rate of gas evolution. When content exceeds 0.40%, amount of gas decreases and ingot structure deteriorates.

PA 19/49T78

BIGEYEV, A.M.

Dissertation: "The Calculation of Open-Hearth Charges in the Scrap-Ore Process." Cand Tech Sci, Magnitogorsk Mining and Metallurgical Inst, Sverdlovsk, 1954. (Referativnyy Zhurnal, Khimiya, Moscow, No 15, Aug 54)

SO: SUM 393, 28 Feb 1955

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CIA-RDP86-00513R000205310007-3"

*BIQSYEV, Abdurashit*  
**BIQSYEV, Abdurashit** Museyevich, dots.kand.tekhn.nauk; PANFILOV, M.I., red.;  
**KEL'NIK, V.P.**, red.izd-va; ZEF, Ye.M., tekhn.red.

[Computation of charges for open-hearth furnaces using the scrap process] Raschet martenovskikh shikht pri skraprudnom protsesse. Sverdlovsk, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, Sverdlovskoe otd-nie, 1957. 194 p. (MIRA 11:2)  
(Open-hearth process)



133-8-6/28

AUTHORS: Bezdenezhnykh, A.A. and Bigeyev, A.M. (Cands.Tech.Sci.),  
Dikshteyn, Ye.I., Perchatkin, P.N. and Sirotenko, A.I.,  
(Engineers).

TITLE: The development of the deoxidation process of rimming  
steel. (Usovershenstvovaniye tekhnologii raskisleniya  
kipyashchey stali).

PERIODICAL: "Stal'" (Steel), No.8, 1957, pp.701-707 (USSR).

ABSTRACT: An investigation of factors causing substantial varia-  
tion in manganese losses during deoxidation of quality  
low carbon rimming steels (08 kпH, 08 kпF, 08 kпP and  
08 kп chemical composition is given in Table 1), produced  
in 400 t open hearth furnaces was carried out. The follow-  
ing students of MGMI participated in the investigation:  
V. Antipin, N.Kuskov, B.Khorshun and others. The composi-  
tion of pig used varied within comparatively wide limits,  
% C 4.1-4.5, Mn 0.15-0.25, Si 0.65-1.0; S 0.025-0.055;  
P 0.085-0.150. The limits of composition of metal and  
slag during the individual smelting periods are given.  
The composition of metal before deoxidation %: C 0.06-0.09;  
Mn 0.04-0.09; S 0.030-0.033; P 0.007-0.010; slag: CaO 43-46;  
SiO<sub>2</sub> 11-17, FeO 10-20. For the deoxidation of steel the  
whole required amount of ferromanganese was added to the

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133-8-6/28

The development of the deoxidation process of rimming steel. (Cont.)

influence of the following factors on manganese losses was studied. 1) The influence of retention time in the furnace after deoxidation; 2) Duration of tapping (Fig.3); 3) The influence of metal temperature before deoxidation; 4) The influence of FeO content in slag (Fig.5). This influence becomes obvious only at FeO content above 12-14%; 5) The influence of silicon content in ferro-manganese (Fig. 6); 6) The influence of carbon content of metal before deoxidation (Fig.7) and as during decarburisation of steel 08 kg ore additions are often made (1-1.5 t) not long before deoxidation, the influence of this addition was also studied (Fig.8). On the basis of the data obtained the consumption of ferromanganese for deoxidation for MMK conditions was calculated, using a formula derived by A.M. Bigeyev:

$$T_{\text{FeMn}} = 10^5 \frac{T([\text{Mn}]_f - [\text{Mn}]_r)}{[\text{Mn}]_{\text{FeMn}} \cdot (100 - U_{\text{Mn}})}$$

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where:  $T_{\text{FeMn}}$  - consumption of ferromanganese for the deoxidation of the whole charge of steel in kg.;  $T$  -

133-8-6/28

The development of the deoxidation process of rimming steel. (Cont.)

furnace capacity, tons;  $[Mn]_f$  - manganese content of finished steel %;  $[Mn]_r$  - residual manganese content in steel before deoxidation, %;  $U_{Mn}$  - total manganese losses (in furnace, runner and ladle), %. The frequency distribution of residual manganese content before deoxidation is given in Fig.9. To facilitate calculations under works conditions, tables were prepared (2 and 3) of required ferromanganese additions for various operating conditions encountered in practice. An example of calculations is given. It is stated in conclusion that the application of the method of calculating the required ferromanganese additions in practice decreased the consumption of the latter by 1 - 1.5 kg/ton of steel and prevented the production of metal outside the composition required.

There are 3 tables, 9 figures and 5 Slavic references.

ASSOCIATION: Magnitogorsk Mining-Metallurgical Institute and MMK.  
(Magnitogorskiy Gorno-Metallurgicheskiy Institut i MMK).

AVAILABLE: Library of Congress  
Card 4/4

137-58-4-6673

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 51 (USSR)

AUTHOR: Bigeyev, A.M.

TITLE: The Effect of Variations in the Unit Load on the Hearth of an Open-hearth Furnace on Certain Technical Parameters of a Heat (Vliyaniye izmeneniya udel'noy nagruzki na pod martenovskoy pechi na nekotoryye tekhnologicheskiye parametry plavki)

PERIODICAL: Sb. nauchn. tr. Magnitogorskiy gornometallurg. in-t, 1957, Nr 11, pp 93-112

ABSTRACT: Quantitative relationships between certain technical parameters of open-hearth steelmaking and the hearth unit load (UL) have been established. An expression for the dependence of hearth UL on the rate of C oxidation,  $V_C = 0.0715 \frac{\mu_2}{\eta}$ , is suggested, where  $\mu_2$  is the oxidizing capacity of the furnace atmosphere,  $\eta = T/S$ , T is the furnace capacity, and S is the hearth area. The relationship between the excess C in the metal per melt and the hearth area at various levels of ore consumption, on the one hand, and the UL on the hearth, on the other hand, has been determined. The greater the hearth UL, the smaller is the possible excess C content per heat, all other con-

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137-58-4-6673

## The Effect of Variations (cont.)

ditions being equal. An increase in hearth UL in the 1-2.5 t/m<sup>2</sup> range evokes a significant reduction in the amount of residual slag required, while in the 3.5- > 5 t/m<sup>2</sup> range it has no effect upon the residual amount of slag. In furnaces with low hearth UL (up to 1 t/m<sup>2</sup>), it is possible to work without running off slag, but if the UL is higher (3-5 t/m<sup>2</sup>) it is necessary to run off slag; moreover, the greater the hearth UL (all other conditions being equal), the more slag has to be run off during the period of fusion. Slag must be run off even if the P content is low. The retained content of various elements is determined by the equation  $U = 100 - [10,000 / (100 + 0.35L_E h / \eta)]$  where U is the burn-off of the element,  $L_E$  is the distribution factor:  $(E) / [E]$ , (E) and [E] characterize the content of the given element in the slag and the metal. A nomogram for the calculation of retained elements is presented. In view of the superior distribution of the element being eliminated in large furnaces, it is easier to obtain a steel of low P content. For maximum utilization of alloying elements in the initial charge, it is desirable to have furnaces with the smallest possible hearth UL.

S. L.

1. Open hearth furnaces--Operation
2. Hearths--Loading
3. Heats--Analysis

Card 2/2

VARNAVSKIY, I.N.; MIKHAYLIKOV, S.V., kand. tekhn. nauk, starshiy nauchnyy sotrudnik; BAPTIZMANSKIY, V.I., kand. tekhn. nauk, dots.; LEVIN, S.L., prof., doktor tekhn. nauk.; OYKS, G.M., prof., doktor tekhn. nauk; GERBER, M.S.; BIGNYEV, A.M., kand. tekhn. nauk, dots.; LIFSHITS, S.I., kand. tekhn. nauk; POBYAKOV, A.Yu., kand. tekhn. nauk, starshiy nauchnyy sotrudnik; POYANOV, A.A., kand. tekhn. nauk, starshiy nauchnyy sotrudnik; OGRYZKIN, Ye.M.; GONCHARENKO, N.I., kand. tekhn. nauk; ABRAMOV, B.A., nauchnyy sotrudnik; MALINOVSKIY, V.G.; LAPOTYSHKIN, N.M., kand. tekhn. nauk; AFANAS'YEV, S.G., kand. tekhn. nauk; SHUMOV, M.M., starshiy nauchnyy sotrudnik; IVANOV, Ye.V.; KPSHTYKH, Z.D., starshiy nauchnyy sotrudnik.

Discussions. Biul. TSNIICEN no.18/19:107-119 '57. (MIRA 11:4)

1. Nachal'nik konvertirnogo tsekhа Orako-Khalilovskogo kombinata (for Varnavskiy). 2. Institut metallurgii Ural'skogo filiala AN SSSR (for Mikhaylikov, Abramov). 3. Direktor Ukrainakogo instituta metallov (for Goncharenko). 4. Dnepropetrovskiy metallurgicheskii institut (for Baptizanskiy, Levin). 5. Zaveduyushchiy kafedroy metallurgii stali Moskovskogo instituta stali (for Oyks). 6. Zaveduyushchiy laboratoriyey Yenakiyevskogo metallurgicheskogo tekhnikumа (for Gerber). 7. Kafedra metallurgii stali Magnitogorskogo gorno-metallurgicheskogo instituta (for Bigeyev). 8. Rukoboditel' konverternoy gruppy Tsentral'noy zavodskoy laboratorii zavoda im. Petrovskogo (for Lifshits). 9. Institut metallurgii im. Baykova AN SSSR (for Polyakov).

(Continued on next card)

**VARNAVSKIY, I.N.**---(continued) Card 2.

10. Ural'skiy institut metallov (for Pofanov). 11. Institut chernoy metallurgii AN USSR (for Ogryskin). 12. Nachal'nik Tsentral'noy zavodskoy laboratorii Yanakiyevskogo metallurgicheskogo zavoda (for Malinovskiy). 13. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii (for Lapotyshkin, Shumov, Spashteyn). 14. Nachal'nik konverternoy laboratorii Tsentral'nogo nauchno-issledovatel'skogo instituta chernoy metallurgii (for Afanas'yev). 15. Nachal'nik laboratorii Vsesoyuznogo nauchno-issledovatel'skogo instituta ogneporov (for Ivanov).

(Bessemer process)

BIGEYEV, A.M.

PHASE I BOOK EXPLOITATION

80V/3942

Zaveryukha, Nikita Vasil'yevich, Engineer, Abdrashit Maseyevich Bigeyev, Candidate of Technical Sciences, Leonid Andreyevich Volkov, Engineer, and Aleksey Andreyevich Bezdenezhnykh, Candidate of Technical Sciences

Razlivka stali v sovremennykh martenovskikh tsekhakh (Teeming of Steel in Modern Open-Hearth Furnace Plants) Sverdlovsk, Metallurgizdat, Sverdlovskoye otd-niye, 1959. 215 p. Errata slip inserted. 2,800 copies printed.

Ed.: M.I. Panfilov; Ed. of Publishing House: N.N. Tsymbalist; Tech. Ed.: R.M. Matlyuk.

**PURPOSE:** This book is intended for technical personnel of open-hearth furnace plants in the metallurgical and machine industries. It may also be useful to students of tekhnikum and schools of higher technical education.

**COVERAGE:** The book reviews problems connected with the crystallization theory, the structure of ingots and ingot defects, their causes, and preventive measures. Modern methods of steel teeming are reviewed in detail, and equipment used at open-hearth plants is described. Work organization, automation and mechanization of certain processes, and safety measures are outlined. The following engineers

Card 1/4



## Teeming of Steel in Modern Open-Hearth Furnace Plants

SOV/3942

took part in the writing of the book: N.I. Lopukhov, V.M. Kalashnikov, and I.S. Tkachev. The authors also thank D.P. Strugovshchikov, Engineer, N.P. Dubrov, Candidate of Technical Sciences, A.N. Morozov, Doctor of Technical Sciences, and M.I. Panfilov, Engineer, for their assistance. There are 48 references: 42 Soviet (including one translation), 4 German, and 2 English.

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1. Killed-steel ingot	8
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Card 2/4

PERCHATKIN, P.N.; PANOV, A.S.; BEZDENZHENYKH, A.A.; BIGNYEV, A.M.; LATIMIN, V.N.;  
D'YAKONOV, A.I.

Sulfur distribution between metal and slag during conversion  
smelting of low-manganese pig iron. Izv. vys. ucheb. zav.; chern.  
met. no.1:33-40 '60. (MIRA 13:1)

1. Magnitogorskiy gorno-metallurgicheskiy institut.  
(Open-hearth process) (Desulfuration)

BIGEYEV, A M.

PHASE I BOOK EXPLOITATION

807/5556

85

Moscow. Institut stali.

Novoye v teorii i praktike proizvodstva martenovskoy stali (New [Developments] in the Theory and Practice of Open-Hearth Steelmaking) Moscow, Metallurgizdat, 1961. 439 p. (Series: Trudy Mezvuzovskogo nauchnogo soveshchaniya) 2,150 copies printed.

Sponsoring Agency: Ministerstvo vysshogo i srednego spetsial'nogo obrazovaniya RSFSR. Moskovskiy institut stali imeni I. V. Stalina.

Eds.: M. A. Glinkov, Professor, Doctor of Technical Sciences, V. V. Kondakov, Professor, Doctor of Technical Sciences, V. A. Khdrin, Docent, Candidate of Technical Sciences, G. N. Oyks, Professor, Doctor of Technical Sciences, and V. I. Yavovskiy, Professor, Doctor of Technical Sciences; Ed.: Ye. A. Borko; Ed. of Publishing House: N. D. Gromov; Tech. Ed.: A. I. Karasev.

PURPOSE: This collection of articles is intended for members of scientific institutions, faculty members of schools of higher education, engineers concerned with metallurgical processes and physical chemistry, and students specializing in these fields.

Card 1/14

PJ

New [Developments] in the Theory (Cont.)

BOV/5556

**COVERAGE:** The collection contains papers reviewing the development of open-hearth steelmaking theory and practice. The papers, written by staff members of schools of higher education, scientific research institutes, and main laboratories of metallurgical plants, were presented and discussed at the Scientific Conference of Schools of Higher Education. The following topics are considered: the kinetics and mechanism of carbon oxidation; the process of slag formation in open-hearth furnaces using in the charge either ore-lime briquets or composite flux (the product of calcining the mixture of lime with bauxite); the behavior of hydrogen in the open-hearth bath; metal desulfurization processes; the control of the open-hearth thermal melting regime and its automation; heat-engineering problems in large-capacity furnaces; aerodynamic properties of fuel gases and their flow in the furnace combustion chamber; and the improvement of high-alloy steel quality through the utilization of vacuum and natural gases. The following persons took part in the discussion of the papers at the Conference: S.I. Filippov, V.A. Kudrin, M.A. Glinkov, B.P. Nam, V.I. Yavovskiy, G.N. Oyks and Ye. V. Chelishchev (Moscow Steel Institute); Ye. A. Kazachkov and A. S. Kharitonov (Zhdanov Metallurgical Institute); N.S. Mikhaylets (Institute of Chemical Metallurgy of the Siberian Branch of the Academy of Sciences USSR); A.I. Stroganov and D. Ye. Fovolotskiy (Chelyabinsk Polytechnic Institute); P.V. Umrikhin (Ural Polytechnic Institute); I.I. Fomin (the Moscow "Serp i molot" Metallurgical Plant); V.A. Fuklev (Central Asian Polytechnic Institute)

Card 2/14

New [Developments] in the Theory (Cont.)

807/5556

and M.I. Beylinov (Night School of the Dneprodzerzhinsk Metallurgical Institute).  
References follow some of the articles. There are 268 references, mostly Soviet.

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Yavoykiy, V. I. [Moskovskiy institut stali - Moscow Steel Institute]. Principal Trends in the Development of Scientific Research in Steel Manufacturing	7
Filippov, S. I. [Professor, Doctor of Technical Sciences, Moscow Steel Institute]. Regularity Patterns of the Kinetics of Carbon Oxidation in Metals With Low Carbon Content [V. I. Antonenko participated in the experiments]	15
Levin, S. L. [Professor, Doctor of Technical Sciences, Dnepropetrovskiy metallurgicheskiy institut - Dnepropetrovsk Metallurgical Institute].	

Card 5/14

New [Developments] in the Theory (Cont.)

80V/5556

9

Perchatkin, P.N. [Engineer], A.A. Bezdenezhnykh [Docent, Candidate of Technical Sciences], A.N. Bigayev [Docent, Candidate of Technical Sciences], and V.N. Letimlin [Engineer], [Magnitogorsk Mining and Metallurgical Institute]. Effect of Furnace Atmosphere on the Behavior of Sulfur During Melting in the High-Capacity Open-Hearth Furnace

361

Ivanov, R.M. [Candidate of Technical Sciences], Ye. V. Abrosimov [Moscow Steel Institute]. Temperature Regime of the Oxygen-Blown Open-Hearth Bath

371

Samarin, A.M. [Corresponding Member of the Academy of Sciences USSR], and A.P. Potrusayev [Engineer], [Moscow Steel Institute]. Change in Metal Composition Caused by Oxygen Blowing

379

Fuklev, V.A. [Docent, Candidate of Technical Sciences, Sredneasiatskiy politekhnicheskiy institut - Central Asia Polytechnic Institute]. Desiliconizing Pig Iron by Oxygen in a Special Spout While Pouring Iron Into the Open-Hearth Furnace

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Card 13/14

ANTIPIN, V.G.; BIGEYEV, A.M.

Oxidizing properties of open-hearth furnaces. Izv. vys. ucheb.  
zav.; chern. met. 4 no.10:37-41 '61. (MIRA 14:11)

1. Magnitogorskiy gornometallurgicheskiy institut.  
(Open-hearth furnaces) (Oxidation)

ZAYAKIN, B.I.; BIGEYEV, A.M.; NZIYENKO, A.M.; Primalni uchastiye:  
TKACHENKO, I.A., inzh.; RABINOVICH, Ye.I., kand.tekhn.nauk;  
IVANOVA, N.G., inzh.; BIGTAGIROV, K.K., inzh.

Sulfur liquation in large rimmed steel ingots. Izv. vys. ucheb.  
sav.; chern. met. 5 no.7:62-70 '62. (MIRA 15:8)

1. Magnitogorskiy metallurgicheskiy kombinat i Magnitogorskiy  
gornometallurgicheskiy institut.  
(Steel ingots--Sulfur content)



ANTIPIN, V.G.; BIGHEEV, A.M. [Bigeyev, A.M.]

Oxidizing capacity of Martin furnaces. Analele metalurgie 16  
no.2:45-50 Ap-Je '62.

VORNOV, F.D.; BIGEYEV, A.M.; DIKSHTEYN, Ye.I.; TRIFONOV, A.G.; KAZAKOV, A.I.; KOROLEV, A.I.; BORODIN, G.L.; ANTIPIN, V.G.; KULAKOV, A.M.; KOZHANOV, M.G.; GAZHUR, V.F.

Investigating the operation of 400-ton open-hearth furnaces following redesign. Stal' 22 no.10:904-907 0'62. (MIRA 15:10)

1. Magnitogorskiy metallurgicheskiy kombinat i Magnitogorskiy gorno-metallurgicheskiy institut.  
(Open-hearth furnaces)

ANTIPIN, V. G.; BIGEYEV, A. M.

Regularities of the passage of oxygen from the gaseous phase into the open-hearth bath. Izv. vys.ucheb.zav.; Chern.Met.7 no. 5: 33-39 '64. (MIRA 17:5)

1. Magnitogorskiy gorno-metallurgicheskiy institut.

BIGEYEV, A. M.; BORODIN, G. L.; POPOV, V. A.; FILIPPOV, V. M.

Hydrogen behavior in the metal of high capacity and extra high capacity open-hearth furnaces. Izv. vys. ucheb. zav.; Chern. met. 7 no.6:44-46 '64. (MIRA 17:7)

1. Magnitogorskiy gornometallurgicheskiy institut.

VORONOV, F.D.; BIGEYEV, A.M.; KOTOV, V.N.; SHITOV, I.S.; LETIMIN, V.N.

Production of fluxed briquets for converter steel smelting.  
Stal' 23 no. 3:214-216 Mr '64. (MIRA 17:5)

1. Magnitogorskiy metallurgicheskiy kombinat i Magnitogorskiy  
gornometallurgicheskiy institut.

BIGEYEV, A.M.; NIKULIN, Yu.P.; TUROVSKIY, B.G.; TORCHINSKIY, M.A.

Removal of liquid slag from open-hearth furnaces by the drawing-off method. Izv. vys. ucheb. zav.; chern. met. 7 no.10:45-48 '64.

(MIRA 17:11)

1. Magnitogorskiy gornometallurgicheskiy institut.

VORONOV, F.D.; BIGEYEV, A.M.; GONCHAREVSKIY, Ya.A.; SARYCHEV, V.F.

Slag formation in the melting period in very high capacity  
open-hearth furnaces of the Magnitogorsk Metallurgical Combine.  
Izv.vys.ucheb.zav.; chern. met. 8 no.4:65-71 '65.

(MIRA 18:4)

1. Magnitogorskiy gornometallurgicheskiy institut i Magnitogorskiy  
metallurgicheskiy kombinat.

12

VORONOV, F.D.; BICEYEV, A.M.; SARYCHEV, V.F.; GONCHAREVSKIY, Ya.A.; MILYAYEV,  
A.F.; VORONOV, V.F.; KOROTKIKH, V.F.

Operation of large-capacity open-hearth furnaces with sinter in  
place of ore in the charge and with the use of oxygen in the flame.  
Stal' 25 no.7:603-605 J1 '65. (MIRA 18:7)

1. Magnitogorskiy metallurgicheskiy kombinat i Magnitogorskiy  
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BIGEYEV, A.M.; NIKULIN, Yu.P.; TORCHINSKIY, M.A.

Removal of liquid slag from open-hearth furnaces. Metallurg 10  
no.8:21-23 Ag '65. (MIRA 18:8)

1. Magnitogorskiy metallurgicheskiy kombinat i Magnitogorskiy  
gornometallurgicheskiy institut.

YAVOYSKIY, V.I., *otv. red.*; BICHEV, A.M., *red.*; BORKO, Ye.A., *red.*; GLINKOV, M.A., *red.*; ZARVIN, Ye.Ya., *red.*; KAPUSTIN, Ye.A., *red.*; KOCHO, V.S., *red.*; KUDRIN, V.A., *red.*; LAPITSKIY, V.I., *red.*; LEVIN, S.L., *red.*; OYKS, G.N., *red.*; ROMENETS, V.A., *red.*; UMRIKHIN, P.V., *red.*; FILIPPOV, S.I., *red.*

[Theory and practice of the intensification of processes in converters and open-hearth furnaces; transactions]  
Teoriya i praktika intensifikatsii protsessov v konverte-  
rakh i martenovskikh pechakh; trudy. Moskva, Metallurgiya,  
1965. 552p. (MIRA 18:10)

1. Meshvuzovskoye nauchnoye soveshchaniye po teorii i praktike intensifikatsii protsessov v konverterakh i martenovskikh pechakh. 2. Moskovskiy institut stali i splavov (for Filippov). 3. Zhdanovskiy metallurgicheskiy institut (for Kapustin). 4. Ural'skiy politekhnicheskiy institut (for Umrikhin).

BIGEYEV, A.M.; MILYAYEV, A.F.

Mathematical representation of the finishing period of the  
open-hearth process. Stal' 25 no.8:701-703 Ag '65.  
(MIRA 18:8)

1. Magnitogorskiy gornometallurgicheskiy institut.

VORONOV, F.D., prof.; FILATOV, A.D., inzh.; DEYNEKO, D.I., inzh.; BIGEYEV,  
A.M., kand. tekhn. nauk; TKACHENKO, I.A., inzh.; SELIVANOV, N.M.,  
kand. tekhn. nauk; ARYCHENKOV, V.P., inzh.

Use of boil intensifiers in the rapid pouring of rimmed steel.  
Stal' 25 no.4:317-319 Ap '65. (MIRA 18:11)

1. Magnitogorskiy metallurgicheskiy kombinat i Magnitogorskiy  
gornometallurgicheskiy institut.

BIGEYEV, M. M.

Study of the Transformation of Austenite into Martensite in Sub-Zero Temperatures.

Trudy, UFAN 9, 13, 1937

BIGYEVA, D.A.; IVANOV, Yu.N.

Temperature balance of Kayrakum Reservoir in 1959. Trudy Inst.  
zool. i paraz. AN Tadzh. SSR no.2618-24 '63 (MIRA 17:3)

1. Kayrak-Kumskaya gidrometeorologicheskaya observatoriya,  
Sredneaziatskaya ekspeditsiya Gosudarstvennogo gidrologiches-  
kogo instituta.

BIGICH, I. S.

"Physico-Chemical Investigation of the  $\text{NaCl-Al}_2\text{Br}_6$ -Nitrobenzene System. (Electroconductivity, Viscosity and Specific Gravity.) by Y.S. Bigich (p. 1783)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1946, Volume 16, No. 11

2

*Handwritten initials: BA*

Physical-chemical investigation of the system NaCl-AlBr<sub>3</sub>-nitrobenzene (electrical conductivity, viscosity, and specific weight). I. B. Blich (Agronom. Inst., Zhitomir). *J. Gen. Chem. (U.S.S.R.)* 18, 1733-40(1947) (in Russian).

—Specific elec. cond.  $\kappa$  of solns. of NaCl-AlBr<sub>3</sub> (from 5.65 to 49.25 wt. %) in PhNO<sub>2</sub> at 10, 20, 30, and 40° show a max. at about 20, 25, 25, 20%, resp. Curves of  $\kappa/\eta$  (where  $\eta$  = viscosity of the soln.,  $\eta$  that of PhNO<sub>2</sub>) against concn. rise uniformly, are convex to the axis of abscissa, and are shifted parallel to each other towards higher ordinates with rising temp. Consequently, the max. of  $\kappa$  does not correspond to any singularity nor does it indicate a chem. compd.; NaCl-AlBr<sub>3</sub> is a strong binary electrolyte. Curves of the mol. cond.  $\mu$  against the diln.  $\phi$  rise concavely to the  $\phi$  axis; from 10 to 40°,  $\mu$  rises linearly with the temp.;  $\mu$  is somewhat higher than that of AlBr<sub>3</sub> in PhNO<sub>2</sub>, the curves having a similar shape. Plots of  $\mu/\eta$  against  $\phi$  show a min. at about  $\phi = 1180$  at all 4 temps. Curves of  $d$ , of the solns. rise with a slight convexity to the axis of concn.; those of  $\eta$  rise very rapidly with rising concn. from 25% upwards. N. Thou

ABB-514 METALLURGICAL LITERATURE CLASSIFICATION

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BIGICH, I. S.

Bigich, I. S., Investigation of electroconductivity and viscosity in the system  $\text{NaBr} \cdot \text{Al}_2\text{Br}_6$  in nitrobenzene. p. 1409.

The electroconductivity, viscosity and specific gravity is investigated of the complex  $\text{NaBr} \cdot \text{Al}_2\text{Br}_6$  in nitrobenzene in concentration limits of 8.05 to 48.63% at temperatures 10, 20, 30, and 40°. The curves of specific electroconductivity goes through a maximum and the molar electroconductivity increases with dilution. Electroductivity increases with increase of temperature and the viscosity decreases.

The Zhitomir Agricultural Institute  
March 10, 1947

SO: Journal of General Chemistry (USSR) 15, (80) No. 8 (1948)

BIGICH, I. S.,

Physico-Chemical investigation of the system  $\text{KBr} \cdot \text{Al}_2 \text{Br}_6 - \text{C}_6 \text{H}_5 \text{NO}_2$ . Electro conductivity, viscosity and specific gravity.

The electroconductivity, viscosity and specific gravity of the complex  $\text{KBr} \cdot \text{Al}_2 \text{Br}_6$  in nitrobenzene was investigated within the range of concentrations from 5.08 to 58.50 percent at temperatures 20, 30, 40, and 50°. From viscosity calculation it is shown that the maximum on the curves of specific electro conductivity disappears and the curves of molecular electroconductivity have an abnormal character in the region of high concentrations. The specific and molecular electroconductivity increases with increase of temperature while the viscosity drops.

The Zhitomir Agricultural Institute  
August 1, 1947

SO: Journal General Chemistry (USSR)  $\frac{18}{18}$ , (80) No. 12, (1948)

BIGICH, I. S.

Bigich, I. S. - "The physical-chemical investigation of the  $\text{NH}_4\text{Cl}$ .  $\text{Al}_2\text{Br}_6$ -nitrobenzene system", (Electrical conductivity, viscosity, and specific gravity), Trudy Zhitomirsk, s.-kh. in-ta, Vol. III, 1949, p. 105-114, - Bibliog: 11 items.

SO: U4630, 16 Sept. 53, (Letopis 'Zhurnal 'nykh Statey, No. 23, 1949).

BIGICH, I. S.

Bigich, I. S. - "An investigation of the electrical conductivity of nitrobenzene solutions", Trudy Zhitomirsk, s.-kh. in-ta, Vol. III, 1949, p. 115-23, - Bibliog: 18 items.

SO: U-4630, 16 Sept. 53, (Letopis 'Zhurnal 'nykh Statey, No. 23, 1949).

BIGICH

"Physico-chemical investigation of the system  $\text{NH}_4\text{Br} \cdot \text{Al}_2\text{Br}_6$  - nitrobenzene.  
Electro-conductivity, viscosity and specific gravity."  
Bigich. (p. 153)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1949, Vol. 19, No. 1

CA

Physicochemical study of the system  $\text{NH}_4\text{Br} \cdot \text{AlBr}_3$ -nitrobenzene—electrical conductivity, viscosity, and density. I. S. Bakh. *Zhur. Obshch. Khim. (J. Gen. Chem.)*, 10, 100-101 (1936) [C. A. 68, 6284, 6285].—Data were obtained at 20°, 30°, 40°, and 50°. The sp. cond. ( $\kappa$ ) curves have rather broad max. at 25-30 wt. %  $\text{NH}_4\text{Br} \cdot \text{AlBr}_3$ . When the concn. is over for the effect of the viscosity, which rises sharply above 30 wt. %, the sp. cond. ( $\kappa$ ) curves show a continual increase with increasing concn. and are slightly convex towards the concn. axis. Similar corrections are made on the mol. cond. Representative data for cond., d., and viscosity at 20° are shown in the table:

Concn. (wt. %)	$\kappa \times 10^3$ (ohm <sup>-1</sup> cm <sup>-1</sup> )	$\eta \times 10^3$ (ohm <sup>-1</sup> cm <sup>-1</sup> )	d.	$\gamma$ (centipoise)
5.01	3.325	2.011	1.342	2.2403
25.84	5.880	15.745	1.4154	4.8151
37.25	1.100	25.453	1.5487	10.3128

A. J. MILLER

BIGICH, I. S.

System ammonium chloride aluminium bromide nitrobenzene.  
(Electrical conductivity, viscosity, and specific gravity.) I. S.  
Bigich. (*J. Gen. Chem. USSR*, 1950, 20, 979-983 (U.S. transl.,  
1017-1023)).—The conductivity,  $\eta$ , and  $\rho$  are measured for  $\text{PhNO}_2$   
solutions of the compound  $\text{NH}_4\text{Cl} \cdot \text{Al}_2\text{Br}_6$  at 20°, 30°, 40°, and 50°.  
The max. in the curve of conductivity against concn. is eliminated  
by a  $\eta$  correction. O. D. SALTMARSH.

U S S R .

✓ A physicochemical investigation of the system  $\text{NH}_4\text{Br} \cdot \text{Al} \cdot \text{Br}_3 \cdot \text{C}_6\text{H}_5\text{NO}_2$  (electroconductivity, viscosity, and specific gravity). I. S. Bliskh and B. V. Sakhnovitsaya. *J. Gen. Chem. U.S.S.R.* 23, 189-90 (1953) (Engl. translation); *Dokl. Akad. Nauk SSSR* 100, 185-90 (1953); cf. *C.A.* 46, 5195f. — The electrocond., viscosity, and sp. gr. for the  $\text{NH}_4\text{Br} \cdot \text{Al} \cdot \text{Br}_3$  complex in nitrobenzene were investigated at 20, 30, 40, and 50° for the concn. range 3.00 to 60.09% of complex. The specific electrocond. curves pass through a max. that disappears when the data are cor. for viscosity. The mol. electrocond. values increase with diln. and develop an abnormal character when cor. for viscosity. The curves were similar to those for the  $\text{NH}_4\text{Br} \cdot \text{Al} \cdot \text{Br}_3$  complex in nitrobenzene (*C.A.* 44, 6229e). J. J. Casey

MA-61



*Bigich, I. S.*  
USSR/Physical Chemistry. Thermodynamics, Thermochemistry, B-8  
Equilibria, Physical-Chemical Analysis, Phase Transitions.

Abs Jour: Ref Zhur-Khimiya, No 5, 1957, 14711.

Author : I. S. Bigich

Inst :

Title : Physical-Chemical Study of System  $KBr \cdot 3AlBr_3 - C_6H_5NO_2$ .  
(Electrical Conductivity, Viscosity, Specific Weight).

Orig Pub: Zh. neorgan. khimii, 1956, 1, No 4, 772-776

Abstract: The electrical conductivity and the specific weight in the system  $KBr \cdot 3AlBr_3 - C_6H_5NO_2$  was studied at temperatures from 20 to 50° and within the concentration range from 3.99 to 60.70 percent by weight of the complex, viscosity was studied within the range up to 54.69 percent. The specific electrical conductivity of the system passes through a maximum at 25 to 30 percent by weight of the complex  $KBr \cdot 3AlBr_3$ . The value of the specific electrical conductivity rises linearly with the temperature rise in case of high concentrations. The magnitudes of the mol.

Card 1/2 Agr. Inst., Belotserkov.

USSR/Physical Chemistry. Thermodynamics, Thermochemistry, B-8  
Equilibria, Physical-Chemical Analysis, Phase Transitions.

Abs Jour: Ref Zhur-Khimiya, No 5, 1957, 14711

APPROVED FOR RELEASE: 06/08/2000 CIA-RDP86-00513R000205310007-3"

Abstract: electrical conductivity adjusted for the system viscosity decrease together with the increase of the electrolyte concentration, they pass through a minimum, after which they increase. The electrical conductivity rises with the temperature rise, and the viscosity and the specific weight of the system drop.

Card 2/2

*BIGICH, I.S.*  
USSR/Thermodynamics. Thermochemistry. Equilibria. Physico-Chemical B-8  
Analysis. Phase Transitions.

Abs Jour : Ref Zhur - Khimiya, No 8, 1957, 26174

Author : I.S. Bigich

Title : Cryoscopic Study of Some Complex Compounds of Aluminum Bromide in Nitrobenzene

Orig Pub : Zh. neorgan. khimii, 1956, 1, No 5, 938-940

Abstract : The molecular weights of the complex compounds of  $\text{NaBr} \cdot \text{Al}_2\text{Br}_6$ ,  $\text{NH}_4\text{Br} \cdot \text{Al}_2\text{Br}_6$  and  $\text{NH}_4\text{Cl} \cdot \text{Al}_2\text{Br}_6$  in nitrobenzene were determined by the cryoscopic method in the concentration range from 2.63 to 12.57% by weight. The initial preparations were made by the method described earlier (RZhKhim, 1954, 1457). It was discovered that the molecular weight of the 3 studied complexes remains roughly 3 times less than the theoretical weight within the whole concentration range. A 3-ion mechanism of electrolytic dissociation of complexes in nitrobenzene of the dissociation degree about 1 is assumed.

Card : 1/1

153 -58-1-5/29

AUTHOR: Bigich, I.S.TITLE: The Physical-Chemical Investigation of the  $\text{LiCl} \cdot \text{Al}_2\text{Br}_6$  -  
-  $\text{C}_6\text{H}_5\text{NO}_2$  System (Fiziko khimicheskoye issledovaniye sistemy  
 $\text{LiCl} \cdot \text{Al}_2\text{Br}_6$  -  $\text{C}_6\text{H}_5\text{NO}_2$ ) Electric Conductivity, Viscosity, and  
Specific Weight (Elektroprovodnost', vyaskost' i udel'nyy ves)PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy: Khimiya i khimicheskaya  
tekhmologiya, 1958, Nr 1, pp. 28-36 (USSR)ABSTRACT: In the course of investigations of electrolyte-solutions in  
various non-aqueous media an abnormal molecular electric conduc-  
tivity could be observed in solvents with good dielectric con-  
stants. The results hitherto obtained by investigating electric  
conductivity have recently been contested by some research  
workers. In the course of the present paper the author investi-  
gated the electric conductivity of the complex  $\text{LiCl} \cdot \text{Al}_2\text{Br}_6$  in  
nitrobenzene within the limits of concentration of from 4.49  
to 39.58 percentage by weight, as well as the specific weight  
and the viscosity up to 45.32% of the complex at temperatures  
of 20, 30, 40 and 50°. The curves of the specific electric con-

Card 1/2

The Physical-Chemical Investigation of the  
 $\text{LiCl} \cdot \text{Al}_2\text{Br}_6 - \text{C}_6\text{H}_5\text{NO}_2$  System. Electric Conductivity, Viscosity, and  
Specific Weight

153 58-1-5/29

ductivity develop over a maximum, but the value of molecular conductivity increases with increasing dilution. With regard to viscosity the maximum on the curves of specific electric conductivity vanishes, but molecular electric conductivity is of normal character. This course taken by the curves confirms Gorenbeyn's opinion of the nature of concentrated solutions. The same development of curves representing the electric conductivity, viscosity, and the specific weight of the complexes  $\text{LiCl} \cdot \text{Al}_2\text{Br}_6$ ,  $\text{NaCl} \cdot \text{Al}_2\text{Br}_6$  and  $\text{NaBr} \cdot \text{Al}_2\text{Br}_6$  investigated in nitrobenzene indicates that these systems appear to be of the same nature. It was further found that with an increase of temperature specific and molecular electric conductivity increases, whereas viscosity is reduced. There are 6 figures, 3 tables, and 18 references, 15 of which are Soviet.

ASSOCIATION: Poltavskiy sel'skokhozyaystvennyy institut. Kafedra obshchey khimii (Poltava Agricultural Institute. Chair of General Chemistry)

SUBMITTED: September 7, 1957

Card 2/2

BIGICH, I.S.; TIMOSHENKO, T.K.

Electric conductivity of solutions of  $KCl - Al_3Br_7 - C_6H_5NO_2$ .  
Izv. vys. ucheb. zav.; khim. i khim. tekhn. 4 no. 2:180-182 '61.  
(MIRA 14:5)

1. Poltavskiy sel'skokhozyaystvennyy institut. Kafedra obshchey khimii.

(Aluminum compounds) (Electric conductivity)

GINZBURG, R.M.; KIPPER, A.R.; SOMINSKIY, N.I.; BIGESTAN, V.Ya.

Thromboangiitis obliterans of the aortic arch (Takayasu's syndrome).  
Terap. arkh. 32 no. 7:81-83 J1 '60. (MIRA 14:1)  
(AORTA—DISEASES) (ARTERIES—DISEASES)

BIGLER, M.S.; SHARYGINA, L.I.; KASPAROVA, A.B.; YAKOVLEV, V.A.;  
GRINEVICH, N.N.; YUDINA, A.P.; SEMICHENKO, N.P.;  
STOLYAROV, A.I.; FURSOVA, T.A.; KOZLOV, I.D., red.;  
SERPOKRYL, S.M., red.

[Leningrad and Leningrad Province in figures; a statistical abstract] Leningrad i Leningradskaya oblast' v tsifrakh; statisticheskii sbornik. Leningrad, Lenizdat, 1964. 250 p.  
(MIRA 18:1)

1. Leningrad (Province) Statisticheskoye oblastnoye upravleniye.
2. Statisticheskoye upravleniye goroda Leningrada (for Bigler, Sharygina, Kasparova, Yakovlev, Grinevich, Yudina).
3. Statisticheskoye upravleniye Leningradskoy oblasti (for Semichenko, Stolyarov, Fursova).
4. Nachal'nik Statisticheskogo upravleniya goroda Leningrada (for Kozlov).

BIGLER, M.S.; SHARYGINA, L.I.; KASPAROVA, A.B.; YAKOVLEV, V.A.;  
GRINEVICH, N.N.; YUDINA, A.P.; SEMICHENKO, N.P.;  
STOLYAROV, A.I.; FURSOVA, T.A.; KOZLOV, I.D., red.;  
SERPOKRYL, S.M., red.

[Leningrad and Leningrad Province in figures; a statistical abstract] Leningrad i Leningradskaya oblast' v tsifrakh; statisticheskii sbornik. Leningrad, Lenizdat, 1964. 250 p. (MIRA 18:2)

1. Leningrad. Statisticheskoye upravleniye. 2. Statisticheskoye upravleniye Leningrada (for Kozlov, Sharygina, Kasparova, Yakovlev, Grinevich, Yudina). 3. Statisticheskoye upravleniye Leningradskoy oblasti (for Semichenko, Stolyarov, Fursova).



GIRFANOV, V.K., kand.sel'skokhozyaystvennykh nauk; BIGLOV, T.T.

Stage development, winter hardiness, and productivity of winter grains. Agrobiologiya no.1:107-110 Ja-F '59. (MIRA 12:4)

1. Institut biologii Bashkirskogo filiala AN SSSR, g. Ufa.  
(Grain)

BIGLOV, T. T., Cand Bio Sci — (diss) "Winterhardness of winter plants in relation to growth and mineral feeding in the forest steppes of Bashkir ASSR," Leningrad, 1960, 17 pp (Botany Institute im V. L. Komarov, AS USSR) (KL, 37-60, 120)

BIGLOV, T.P.

Frost resistance of winter grain crops in relation to age and the intensity of growth processes. Izv. AN SSSR. Ser. biol. no. 3:424-432. Moscow 1964. (MIRA 17:5)

i. Institute of Biology, the Bashkiria Branch of Academy of Sciences of the U.S.S.R., Ufa.

BIGLOV, T.T.

Uptake of radioactive phosphorus ( $p^{32}$ ) by winter plants during low-temperature hardening. Fiziol. rast. 11 no. 3:480-486 '64. (MIRA 17:7)

1. Institut biologii Bashkirsikogo filiala AN SSSR, Ufa.

BIGLOV, Z. I.

"Differential Operators of Degenerate Systems of Differential Expressions of the Second Order." Cand Phys-Math Sci, Moscow State Pedagogic Inst imeni V. I. Lenin, Moscow, 1954. (KL, No 5, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)  
SO: Sum. No. 556, 24 Jun 55

USSR/Mathematics - Differential operators

Card 1/1 Pub. 22 - 2/45

Authors : Biglov, Z. I.

Title : About a differential operator formed by a system of differential expressions of the second order

Periodical : Dok. AN SSSR 99/4, 495-497, Dec 1, 1954

Abstract : Properties of a symmetrical differential operator,  $L_{\theta}$ , formed by a system of differential expressions characterizing Hilbert's space are described in the form of theorems. Eight Russian references (1950-1953).

Institution : Moscow State Pedagogical Institute im. V. I. Lenin

Presented by: Academician M. V. Keldysh, September 27, 1954

BIGLOV Z.I.

SUBJECT USSR/MATHEMATICS/Differential equations CARD 1/3 PG - 863  
 AUTHOR BIGLOV Z.I.  
 TITLE ~~Decomposition in terms of eigenfunctions of a system of~~  
 differential equations of second order.  
 PERIODICAL Doklady Akad. Nauk 112, 797-799 (1957)  
 reviewed 6/1957

Let  $L_n^2(0, \infty)$  be the space of vector functions  $y(x) = \{y_1(x), y_2(x), \dots, y_n(x)\}$  being summable in the square. Let  $L_0$  be an operator in  $L_n^2(0, \infty)$  which is generated by the differential expression

$$(1) \quad l(y) = -y'' + P(x)y \quad (0 \leq x < \infty), \quad (P(x) \text{ is a real symmetric matrix being summable on } (0, \infty))$$

and the boundary condition

$$y'(0) = \theta y(0), \quad \theta - \text{Hermitian matrix.}$$

Let  $\Omega_1(x, s)$ ,  $\Omega_2(x, s)$  ( $s^2 = \lambda$ ) be linearly independent solutions of the matrix equation

$$(2) \quad l(Y) - \lambda Y = 0.$$

Doklady Akad.Nauk 112, 797-799 (1957)

CARD 3/3

PG - 863

$F_1(s) = \text{l.i.m.}_{n \rightarrow \infty} \int_0^{\infty} \Omega_1(x,s) f(x) dx$  and l.i.m. is the boundary value in the sense of the norm in the Hilbert space which is generated by the spectral matrix of  $L_0$ .

2. For the kernel  $K(x, \xi, \mu)$  of the resolvent of  $L_0$  holds ( $\text{Im } \mu \neq 0$ ):

$$K(x, \xi, \mu) = \sum_{k=1}^{\infty} \frac{y_k(x) y_k^*(\xi)}{(\lambda_k - \mu) \int_0^{\infty} \|y_k\|^2 dx} - \frac{1}{\pi} \int_0^{\infty} \frac{\sum_{i,j=1}^n \Omega_i(x,s) \varrho_i(s) \varrho_j^*(s) e_i e_j^* \Omega_j^*(\xi,s)}{(s^2 - \mu) \left[ \sum_{i=1}^n (|\xi_i(s)|^2 + 1) \|\varrho_i\|^2 |e_i|^2 \right]} ds$$

The integral in the right half of the equation converges absolutely and uniformly with respect to  $x$  and  $\xi$  in  $0 \leq x, \xi < \infty$ .

INSTITUTION: Bashkiric Public Educational Institute.



BIGMA, E. lieutenant.

Radio manipulation line. Voenn. sviaz. 16 no. 5:44-45 My '58.  
(Radio, Shortwave) (Radiotelegraph) (MIRA 1115)

BIGMAN, V.Yu., kandidat tekhnicheskikh nauk.

Високоя якасць вовны

Higher quality of wool from thoroughbred and crossbred sheep.  
Tekst.prom. 14 no.8:21-24 Ag '54. (MLRA 7:10)  
(Wool)

BIGMAN, V.Yu., kandidat tekhnicheskikh nauk; KUZMICHYEV, F.I.

Utilization of spring-shorn wool in the fulling and felt industry.  
Leg.prom. 15 no.2:15-18 F '55. (MLRA 8:4)  
(Wool) (Felt)

~~1. 13243-66~~

ACC NR: AP6006047

SOURCE CODE: CZ/0053/65/014/004/0296/0296

AUTHOR: Janku, I.; Bignami, G.; Bovet, D.

ORG: Institute of Pharmacology, CSAV, Prague (Farmakologicky ustav CSAV); Chemical Therapeutic Laboratory, National Institute of Health, Rome (Laboratori di Chimica Terapeutica Istituto Superiore di Sanita)

TITLE: Effect of nicotine, thyroxine, methylthiouracil and their combinations on formation of defense conditioned reflexes in mice [This paper was presented during the Twelfth Pharmacologic Days, Smolenice, 27 Jan 65.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 296

TOPIC TAGS: mouse, conditioned reflex, drug effect, nervous system drug, pharmacology, thyroid gland

ABSTRACT: Nicotine had a strong effect in facilitating the establishment of conditioned reflexes in rats; this effect was independent of the functional condition of the thyroid gland. [JPRS]

SUB CODE: 06 / SUBM DATE: none / OTH REF: 005 / SOV REF: 001

Card 1/1