

VLADIMIROV, G.Ye.[deceased]; LYZLOVA, S.N.; KOLOTILOVA, A.I., doktor  
biol. nauk, otv. red.; PETROVICHEVA, O.L., red.; VODOLAGINA,  
S.D., tekhn. red.

[Enzymology; basic problems concerning ferments] Enzimologia;  
obshchie voprosy uchenia o fermentakh. Leningrad, Izd-vo  
Leningr. univ., 1962. 255 p. (MIRA 15:5)  
(Enzymes) (Digestive ferments)

KOLOTILOVA, A.I.; LYZIOVA, S.N.; PANTELEYEVA, N.S.

Fifth International Biochemical Congress. Vest. LGU 17  
no.3:157-158 '62. (MIRA 15:2)  
(Biochemistry--Congresses)

KOLOTILOVA, A.I.

Conference on hypoxia and biochemistry of the nervous and  
muscular systems. Vest. LGU 17 no.9:158-160 '62. (MIRA 15:5)  
(BIOCHEMISTRY—CONGRESSES)

KOLOTILOVA, Aleksandra Il'inichna; VLADIMIROVA, G.Ye., prof., red.;  
PIASTRO, V.D., red.; ZHUKOVA, Ye.G., tekhn. red.

[Metabolism; a short textbook for students of the Soil Biology Department of the Evening Division of Leningrad University] Obmen veshchestv; kratkoe uchebnoe posobie dlia studentov biologo-pochvemogo fakul'teta vechernego otdeleniia Leningradskogo universiteta. Pod red. G.E.Vladimirova. Leningrad, Izd-vo Leningr. univ., 1962. 141 p. (MIRA 15:7)

(Metabolism)

KOLOTILOVA, A.I.

Some aspects of the molecular structure and functions of  
proteins. Vest. IGU 18 no.15:119-132'63. (MIRA 16:9)  
(PROTEINS)

KOLOTILOVA, A.I.; KOROVKIN, B.F.; LYZLOVA, S.N.; VAGNER, V.K.; VASILENKO,  
E.T.; DZUTSOV, N.K.

Free ribonucleotides and the activity of some enzymes of the  
pentose phosphate cycle in the heart muscle in experimental  
myocardial infarction. Biokhimiia 28 no.1:113-121 Ja-F '63.  
(MIRA 16:4)

1. Chair of Biochemistry, State University, and Biochemical  
Laboratory, District Military Hospital, Leningrad.  
(HEART—INFARCTION) (NUCLEOTIDES)  
(PENTOSE PHOSPHATES)

VAGNER, V.K.; KOLOTILOVA, A.I.; KOROVKIN, B.F.

Blood serum transketolase reaction in myocardial infarct. Vop.med.khim.  
10 no.2:158-163 Mr-Ap '64. (MIRA 18:1)

1. Chair of Biochemistry of the A.A.Zhdanov State University Leningrad.

KOLOTILOVA, A.I.

Vladimir Aleksandrovich Engel'gardt, 1894- ; on his 70th  
birthday. Vest. LGU 20 no.9:165-166 '65.

(MIRA 18:6)



VLADIMIROV, Georgiy Yefimovich, prof.; PANTELEYEVA, Nadezhda  
Semenovna; KOLOTILOVA, A.I., prof., doktor biol. nauk,  
otv. red.; PETROVICHEVA, O.L., red.

[Functional biochemistry; selected chapters: Respiratory  
function of the blood, biochemistry of the muscles and the  
brain] Funktsional'naya biokhimiya; izbrannye glavy: Dy-  
khatel'naya funktsiya krovi, biokhimiya myshts i mozga.  
Leningrad, Izd-vo Leningr. univ., 1965. 240 p.

(MIRA 18:6)

KOLOTILOVA, A.I.; LYZLOVA, S.N.; VAGNER, V.K.; KOROVKIN, B.F.

Some biochemical changes in the myocardium and the blood  
at an early stage of experimental myocardial infarct.  
Vop.med.khim. 11 no.5:70-74 S-0 '65.

(MIRA 19:1)

1. Leningradskiy gosudarstvennyy universitet imeni A.A.Zhdanova.  
Submitted May 25, 1964.

KOLOTILOVA, D.G.

Effect of external reactive resistance on the self-excitation conditions  
of a generator feeding a half-wave tuned line. Trudy Sib. nauch.-issl.  
inst. energ. no.1:61-69 '64. (MIRA 18:5)

KOLOTILOVA, D.G.

Use of terminal transformers for half-wave tuning of an electric  
power transmission line. Trudy. Transp.-energ. Inst. Sib. otd.  
AN SSSR no.11:59-66 '60. (MIRA 14:6)  
(Electric power distribution) (Electric transformers)

LUKASHOV, E.S.; KOLOTILOVA, D.G.

Consideration of transients in a half-wave tuned line in studying the self-excitation of the generator. Trudy Transp. energ. inst. Sib. otd. AN SSSR no.14:54-60 '62. (MIRA 16:9)  
(Electric power distribution)

KOLOTILOVA, D.G.

Decrease in expenditures on tuning systems by utilizing the reactive power of the generator. Trudy Transp. energ. inst. Sib. otd. AN SSR no.14:88-94 '62. (MIRA 16:9)  
(Electric power distribution)

KOLOTILOVA, D.G.; LUKASHOV, E.S.

Choice of the parameters of the damper stages of a generator feeding a half-wave tuned line taking into account self-excitation conditions. Trudy Transp.-energ. inst. Sib. otd. AN SSSR no.16:79-89 '63. (MIRA 16:11)

KOLOTILOVA, L.V.

Epidemiological significance of vaccination in whooping  
cough foci. Zhur. mikrobiol., epid. i immun. 33 no.7:50-53  
Jl '62. (MIRA 17:1)

1. Iz L'vovskogo instituta epidemiologii, mikrobiologii i  
gigiyeny.



DAVYDOVA, I.S.; KOLOTILOVA, L.V.

Antidiphtherial immunity level in children following viral  
influenza. Zhur.mikrobiol.epid. i immun. 30 no.5:85-86  
My '59. (MIRA 12:9)

1. Iz L'vovskogo instituta epidemiologii, mikrobiologii i gigiyeny.  
(INFLUENZA, immunol.  
post-influenzal anti-diphtherial immun. in  
child. (Rus))  
(DIPHTHERIA, immunol.  
same)

DAVYDOVA, I.S.; BIRKOVSKIY, Yu.Ye.; KALITSEVA, L.I.; KOLOTILOVA, L.V.;  
TURETSKAYA, E.S.

Diseases caused by S.Breslau. Zhur.mikrobiol. epid. i immun. 32  
no.4:143 Ap '61. (MIRA 14:6)

1. Iz L'vovskogo Institutu epidemiologii, mikrobiologii i gigiyeny.  
(SALMONELLA)

KALITSEVA, L.I.; KOLOTILOVA, L.V.; LYASKOVSKAYA, M.N.

Epidemiology of typhoid fever. Zhur. mikrobiol., epid. i  
immun. 33 no.1:50-53 Ja '62. (MIRA 15:3)

1. Iz L'vovskogo instituta epidemiologii, mikrobiologii i  
gigiyeny i oblastnoy sanitarno-epidemiologicheskoy stantsii.  
(TYPHOID FEVER)

KOLOTILOVA, L.V.; POLONGHUK, T.M.; SILINA, S.F.

Comparative data on whooping cough incidence in children vaccinated and unvaccinated with antipertussis preparations. Zhur. mikrobiol., epid. i immun. 41 no.4:25-29 Ap '64.

(MIRA 18:4)

1. L'vovskiy institut epidemiologii, mikrobiologii i gigiyeny.

LIPKIN, M.Ye.; KISHKO, Ya.G.; URIN, A.I.; KOLOTILOVA, L.V.; IONOV, L.I.

Use of the fluorescent method for the detection of poliomyelitis  
and rabies viruses. Vop. virus. 10 no.1:26-29 Ja-F '65.

(MIRA 18:5)

1. Institut epidemiologii, mikrobiologii i gigiyeny, L'vov.

TURSIN, V.M.; CHEBOTAREVA, L.G.; BELOUSOVA, L.N.; KOLOTILOVA, N.D.

Synthesis of vitamin B<sub>1</sub>. Zhur. prikl. khim. 34 no.1:229-232 Ja  
'61. (MIRA 14:1)

(Vitamins—B)

TURSIN, V.M.; CHEBOTAREVA, L.G.; MAKAROVA, L.N.; KOLOTILOVA, N.D.

Production of 2-methyl-4-amino-5-acetamidomethylpyrimidine. Trudy  
VNIVI 8:35-38 '61. (MIRA 14:9)

1. Laboratoriya vitaminov kompleksa B Vsesoyuznogo nauchno-issledovatel'skogo instituta.

(Pyrimidine)

KOLOTILOVA, N. V.

Removal of colors from waste papers and their final treatment.  
Bum.prom. 35 no.10:30 0 '60. (MIRA 13:10)  
(Waste paper)





TURSIN, V.M.; CHEBOTAREVA, L.G.; KOLOTILOVA, N.D.

Synthesis of 2-methyl-4-amino-5-ethoxymethylpyrimidine. Trudy  
VNIVI 6:17-20 '59. (MIRA 13:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.  
Sinteticheskaya laboratoriya.  
(PYRIMIDINE)

TURSIN, V.M.; KOLOTILOVA, N.D.

Method for the continuous production of the methyl and ethyl esters of formic and acetic acid. Trudy VNIVI 6:31-33 '59.

(MIRA 13:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut. Sinteticheskaya laboratoriya.

(FORMIC ACID)

(ACETIC ACID)

USSR, Physics - Semiconductor

FD-1360

Card 1/1 : Pub. 146-5/18

Author : Adirovich, E. I., and Koltilova, V. G.

Title : Kinetics governing the formation and relaxation of nonequilibrium current carriers during irradiation of a semiconductor

Periodical : Zhur. eksp. i teor. fiz., 26, pp 281-292, Mar 1954

Abstract : The authors investigate the kinetics governing the occurrence of photoelectrons and photo-holes in the case of irradiated semiconductor with bipolar conductivity, and also study the kinetics of their relaxation after cessation of the irradiation. They find for the one-dimensional case the solution of the linearized problem in a general form and in the asymptotic description for certain limiting conditions. They also consider the stationary distribution of nonequilibrium current carriers, and clarify the conditions for the applicability of the linearized equations and their connection with the requirement of quasineutrality. Three references, USSR (E. I. Adirovich, DAN SSSR, 86, 1085, 1952; S. L. Sobolev, Uravneniya matematicheskoy fiziki, State Technical Press, 1947; A. N. Tikhonov and A. A. Samarskiy, Uravneniya matematicheskoy fiziki, GITTL, 1951.).

Institution : Physics Institute imeni P. N. Lebedev, Acad. Sci. USSR

Submitted : May 29, 1953

КОЛОТИЛОВА, В. Г.

USSR/Physics - Semiconductor

FD-3247

Card 1/1 Pub. 146 - 6/44

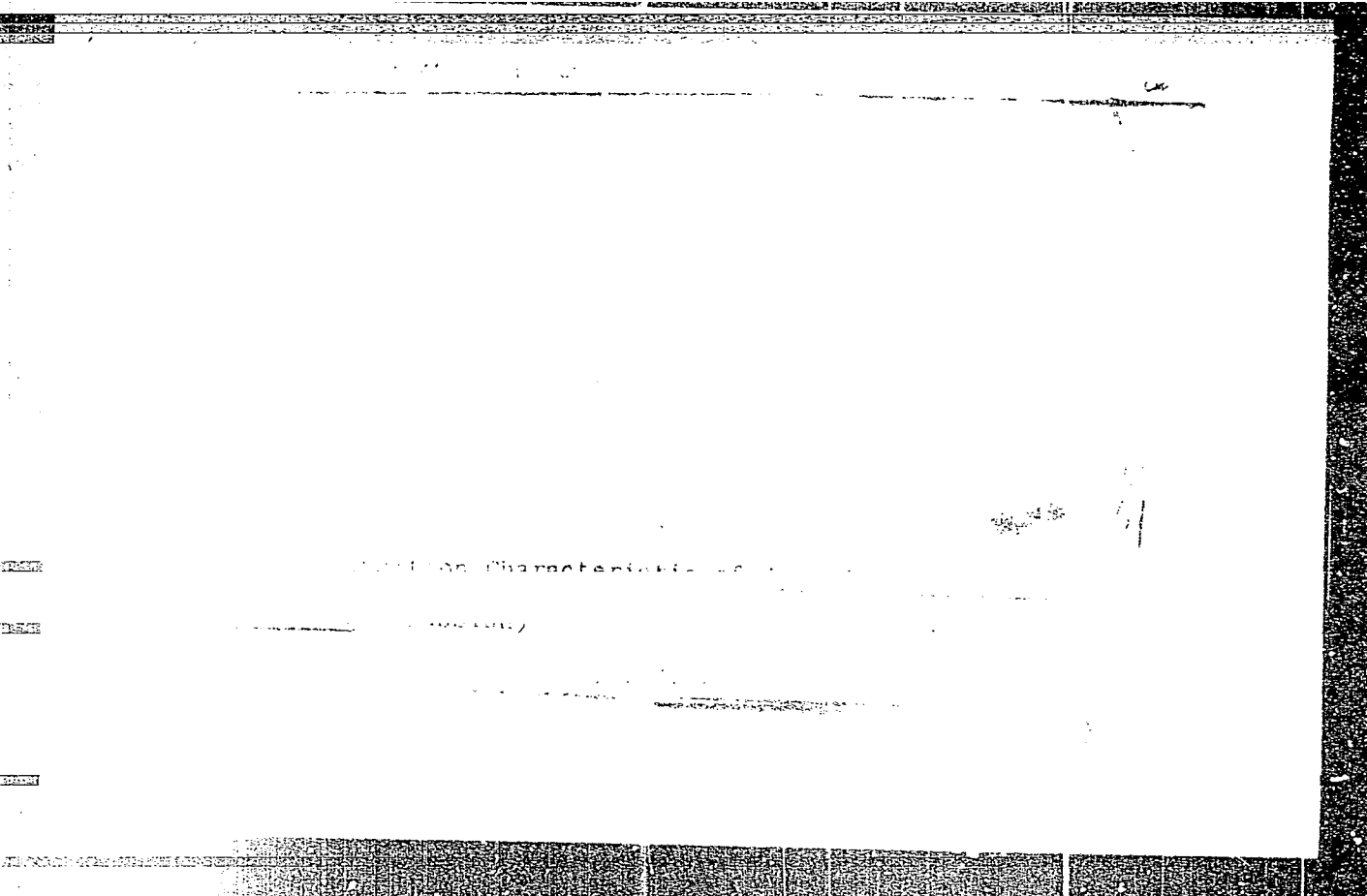
Author : Adirovich, E. I.; Kolotilova, V. G.

Title : Propagation of a short pulse in a semiconductor limited to two electron-hole transitions

Periodical : Zhur. eksp. i teor. fiz., 29, No 6(12), Dec 1955, 770-777

Abstract : The authors calculate the propagation of a short pulse in a semiconductor limited to two electron-hole transitions upon one of which a positive displacement is imposed and upon the other ( $x=w$ ) a large negative displacement is imposed, which corresponds to the regime of a semiconductor triode. The shape of the pulse is approximated by a delta-function. By means of a Laplace transform they find the p-representation of the current in any cross-section of the semiconductor. Passing over to the original for  $x=w$  permits one to obtain an expression for the collector current  $i(w,t)$  and to explain the influence of diffusion and recombination of nonequilibrium current carriers in the semiconductor upon the shape of the pulse in the collector. Six references: e.g. E. I. Adirovich, DAN SSSR, 86, 1085, 1952; V. P. Siforov, Radiopriyemnyye ustroystva [Radio receiver devices], 1954.

Submitted : July 19, 1954









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1. The purpose of this document is to provide information regarding the activities of the [redacted] in the [redacted] area.

2. The [redacted] has been identified as a [redacted] and is currently [redacted] in the [redacted] area.

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KOLOTILOVA, V. G.

Kolotilova, V. G. -- "Non-Stationary Processes in a Semiconductor Layer Bounded by Two Electron-Perforated Shifts (Transistors?) in the Case of Small Disturbances to Thermodynamic Equilibrium." Physics Inst imeni P. N. Lebedev, Acad Sci USSR. Moscow, 1956. (Dissertation for the Degree of Candidate in Physicomathematical Sciences).

So: Knizhnaya Letopis', No. 11, 1956, pp 103-111.

ADIROVICH, E.I.; KOLODILOVA, V.G.; MALIN, B.V.

Transient conditions in semiconductor triodes. Radiotekh. i elektron  
1 no.8:1052-1057 Ag '56. (MIRA 10:1)

(Semiconductors)

(Transistors)

Propagation of a light wave  
by double-electron-hole transitions. B. I. Rudakov (M)  
G. Kolotilova. *Soviet Phys. JETP* 2, 670-676 (1966)

KOLOTILOVA, V.G.

Category : USSR/Electronics - Semiconductor Devices and Photoelements

H-8

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 4369

Author : Adirovich, E.I., Kolotilova, V.G.

Title : Concerning the Theory of Transients in Transistors

Orig Pub : Dokl. AN SSSR, 1956, 108, No 4, 629-632

Abstract : In earlier published articles the authors (Referat Zh. Fizika, 1956, 20341, 23106) obtained the transient characteristic of a grounded-base transistor. This article is devoted to the determination of transient characteristics for the other two modes -- with grounded emitter and with grounded collector. Bibliography, 8 titles.

Card : 1/1

KOLOTILOVA, V.G.

AUTHOR ADIROVICH, E.I., and KOLOTILOVA, V.G. PA - 2535  
TITLE Influence of the Emitter Effectiveness on Semiconductor  
Triod Transition Characteristics. (Vliyaniye effektivnosti  
emittera na perekhodnyye kharakteristiki poluprovodnikovyykh  
triodov, Russian)  
PERIODICAL Zhurnal Tekhn. Fiz., 1957, Vol 27, Nr 3, pp 473 - 477 (U.S.S.R.)  
Received: 4 / 1957 Reviewed: 6 / 1957  
ABSTRACT With reference to the papers of the author in Doklady Akad.  
Nauk SSSR, 1955, Vol 105, Nr 4, and 1956, Vol 108, Nr 4,  
where the transition characteristics for semiconductor triods  
were found, the dependence of transition characteristics on the  
efficiency of the emitter  $\eta$  is investigated by the present paper  
First the mathematical formulation of the problem of trans-  
ition characteristics in the case of an earthed basis is written  
down for the case  $\eta \neq 1$ . The coefficient  $\eta$  expresses in the  
last equation of this system the boundary condition on the  
emitter. The effectiveness of the emitter in this case does  
not alter the form of the transition characteristic nor the  
value of the time of adjustment. Also the frequency-character-  
istic of the triod does not change. Finally the required  
equation for the transition characteristic of a semi-conduc-  
tor triod for the case of an earthed emitter is obtained for  
an arbitrary value of the emitter efficiency  $\eta$ . Now the most

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AUTHOR  
TITLE

KOLOTILOVA, V.G.,

PA - 2787

Passage of single and Periodic Pulses through the Semiconductor Triode.  
(Prokhozheniye odinochnykh i periodicheskikh impul'sov toka cherez  
poluprovodnikovyy triod. - Russian)

PERIODICAL

Zhurnal Tekhn. Fiz., 1957, Vol 27, Nr 4, pp 630-637, (U.S.S.R.)

Received 5/1957

Reviewed 6/1957

ABSTRACT

At first a triode with an earthed basis is investigated. The periodic  $\delta$  pulses may be regarded as a limiting case of  $\Pi$  pulses with a period tending towards zero and an amplitude tending towards infinity. The problem of the creation of periodic pulses may be solved in analogy to that of the propagation of individual  $\delta$  pulses (ZhETF, 1955, 29, 6, 770). The process of the passage of pulses through the semiconductor triode is characterized by the following factors. 1) Adjusting time of the steady periodic operation, 2) Maximum frequency of the sequence of pulses which is determined according to reaction conditions of the individual pulses in the collector. 3) The lowest frequency of pulse sequence corresponding to the initial overlapping of the individual pulses in the collector, 4) The time of the fading-out of the collector current after passage of the pulse sequence. The transition processes of the adjusting and fading-out of the collector current are investigated. From the formula derived here all characteristics for the sequence of the  $\Pi$  pulses of finite length as well as for the periodic  $\delta$  pulses may be determined. In the second chapter a triode with earthed

Card 1/2

ZINCHENKO, Andrey Vasil'yevich; VIKHMAN, Viktor Semenovich; TRUBNIKOV,  
N.V., red.; KOLODILOVA, Yu.V., referent, otv. za vypusk;  
SUKHAREVA, R.A., tekhn.red.

[New automatic control systems for machine tools] Novye sistemy  
upravleniia metalloreshushchimi stankami. Moskva, 1959. 36 p.  
(Moskovskii dom nauchno-tekhnicheskoi propagandy. Peredvoi opyt  
proizvodstva. Seria: Progressivnaia tekhnologia mashinostroeniia,  
vyp. 3). (MIRA 13:8)

(Machine tools--Numerical control)



S/118/60/000/007/004/004  
A161/A029

AUTHOR: Kolotilova, Yu. V., Engineer

TITLE: Application of Hydraulic Tracing Drive for Automation of  
Equipment <sup>14</sup> <sub>17</sub>

PERIODICAL: Mekhanizatsiya i avtomatizatsiya proizvodstva, 1960, No. 7,  
pp. 59-60

TEXT: Moskovskiy dom nauchno-tekhnicheskoy propagandy im. F. E. Dzerzhinskogo (The Moscow House of Scientific-Technical Propaganda imeni F. E. Dzerzhinskiy) and Gosudarstvennyy komitet Soveta Ministrov SSSR po avtomatizatsii i mashinostroyeniyu (State Committee for Automation and Machine Building in the USSR Council of Ministers) organized last March a special seminar "Automation of Equipment by Means of Application of Hydraulic Tracing Drive". The article lists the reports presented at the seminar. It was opened by Ye. M. Khaymovich's report on the "Hydraulic Tracing Drive - An Effective Means of Automation and Modernization of Equipment". Candidate of Technical Sciences B. L. Korobochkin read a paper on "Single-Coordinate Hydraulic Tracing Drives and Their Applications", comparing the

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A161/A029

Application of Hydraulic Tracing Drive for Automation of Equipment

static and power characteristics of hydraulic tracing systems and stating that the system with a differential cylinder with a one-edge slide valve and constant pressure is best suited for cases where there is no need for high accuracy and rigidity and where alternating loadings are absent; Candidate of Technical Sciences V. A. Leshchenko dealt with "Design of Two-Coordinate Hydraulic Tracing Drives and Their Field of Application in Automation", stating that extensive design work is done by ENIMS on electro-hydraulic transformers in machine tools with tracing drive which are a combination of an electric pickup and a hydraulic power drive. Reports were read on: "The Prospective Applications of Rotary Hydraulic Drives and Volume Control in Hydraulic Tracing Drives and Program Control Systems" by Candidate of Technical Sciences Ya. A. Kamenir; "Electrically Controlled Hydraulic Tracing Drive with Forward and Rotary Motion", by Candidate of Technical Sciences G. I. Kamenetskiy; "Experience with Application of Electro-Hydraulic Transformers in Machine Tool Drives", by Engineer A. I. Tikhonov. Representatives from the "Krasnyy proletariy", Elektrostal'skiy zavod tyazhelogo mashinostroyeniya (Elektrostal' Heavy Machine Building Plant) and other plants exchanged information on their experience with

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## Application of Hydraulic Tracing Drive for Automation of Equipment

hydraulic tracing drives. Deputy Chief Designer of Gor'kovskiy zavod frezernykh stankov (Gor'kiy Milling Machine Plant), N. V. Plotnikov, gave information on automation of machine tools at this plant using these drives. Twelve copying milling machines were developed by the plant in 10 years and brought into practical use. In hydraulic copying "ГФ-214" (GF-214) and "ГФ-214М" (GF-214M) machines the automatic cutting process lasts 8 hours and the placing of the part, clamping, and removing takes only 10 minutes. On the "ГФ-619" (GF-619) and "ГФ-620" (GF-620) machines the cutting takes 6 hours and the auxiliary time only 15 minutes. The report by S. M. Kats "Experience with Hydraulic Tracing Drive in Testing Stands" dealt with the use of this drive in testing and setting gyroscopic and other instruments and devices. V. P. Temnyy presented a paper on "Hydraulic Tracing Power Drive for Automation of Heat Power Processes"; S. S. Barvina - on "Experience With the Automation of Billeting Stamping Equipment by Using Hydraulic Tracing Drives"; Candidate of Technical Sciences G. I. Kamenetskiy on the calculation principles for hydraulic tracing drives. Recommendations and practical suggestions were made by the seminar participants concerning better use of the drives. One-coordinate tracing drives with independent

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Application of Hydraulic Tracing Drive for Automation of Equipment

and automatically controlled feed were recommended for automation of machine tools for machining parts with interrupted contours; for machining parts with complex outline and internal surfaces two-coordinate hydraulic drives and their combinations with one-coordinate drives are to be used; for the automation of billeting stamping and other presses or other heavy-duty equipment, high-pressure drives were recommended. The necessity was stressed to organize mass-production of standardized component units of drives, as well as to improve the quality of the design and making. ✓

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S/118/60/000/02/018/024  
D038/D006

AUTHOR: Kolotilova, Yu.V., Engineer

TITLE: Composite Automation<sup>4</sup> and Mechanization of Mechanical Metalworking Processes

PERIODICAL: Mechanizatsiya i avtomatizatsiya proizvodstva, 1960, 14, Nr 2, pp 53-54 (USSR)

ABSTRACT: The Moskovskiy Dom nauchno-tehnicheskoy propagandy im. F.E. Dzerzhinskogo (The Moscow House of Scientific-Technical Propaganda imeni F.E. Dzerzhinskiy) organized several seminars. The one described opened with a report from Doctor of Technical Sciences A.P. Vladziyevskiy who outlined the planned development, mentioning that in 1957 there were 295 types of automatic and semi-automatic machine tools, and that 650 will be produced by 1965. The automatic lines for machining bevel gears, developed by ENIMS, will be produced in quantity. A.Ye.

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S/118/60/000/02/018/024  
D038/D006

Composite Automation and Mechanization of Mechanical Metalworking Processes

Prokopovich, head of the Upravleniye avtomatizatsii i sredstv proizvodstva dlya mashinostroyeniya (Directorate of Automation and Production Means for Machine Building) of the Gosudarstvennyy komitet Soveta Ministrov SSSR po avtomatizatsii i mashinostroyeniyu (State Automation and Machine Building Committee of the Ministers Council of the USSR), read a paper on "The Level of Modern Machining Techniques and Methods of Evaluating it". N.A. Razumov, member of the Sovet Mosgorsovnarkhoz (Mosgorsovnarkhoz Council) reported on "Complete Automation and Mechanization of Technologic Processes in Machine Building at the Moscow Plants". He mentioned that the special 8-position unit head "1S-212" machine tool for bicycle tie rods replaces 15 conventional machines and requires 2 operators instead of the former 30. An

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Composite Automation and Mechanization of Mechanical Metalworking Processes

automatic line machining the frames of electric motors resulted in nearly half million rubles annual economy. Moscow plants will produce 450 automatic machining lines in seven years and the output of multiposition unit head machine tools will be trebled, while production of unified (standardized) machine components will be organized. Moskovskiy zavod im. Likhacheva (Moscow Plant imeni Likhachev) envisages an overhead pushing conveyer which will release 1000 workers and give an estimated annual economy of 20 million rubles. Doctor of Technical Science F.S. Dem'yanyuk treated the basic principles of complete automation and mentioned examples of new equipment combining several machining operations, like multiposition target type semiautomatics with up to 10 works positions and 100 cutting tools working simultaneously. Professor B.L. Boguslavs-

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DO38/D006

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kiy read a paper on "The Basic Development Trends of High-Automated Lathes", mentioning that one fifth of the machine tools planned for output by 1965 are lathes. B.S. Blakshin, Doctor of Technical Sciences, Honored Scientist and Technician of the RSFSR, spoke on "Automation of Circular Grinding and Universal Milling Machines". Candidate of Technical Science A.N. Malov discussed "Automatic and Semi-Automatic Attachments for Metalcutting Machine Tools", R.G. Yashunskiy (of NIITavtoprom) reported on automatic loading devices for general-purpose machine tools mentioning the vibrodriives developed at NIITavtoprom - namely the "VP-200" which holds a cup 200-300 mm in diameter, the "VP-400" for cups 400 mm in diameter and the "VP-600" for 600 mm cups. Candidate of Technical Sciences A.N. Zhuravlev spoke, sometimes critically, of mechanical and automatic dimension control in machining. It is planned to replace the existing technical inspection system

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D038/D006

Composite Automation and Mechanization of Mechanical Metalworking Processes

based on passive recording of spoilage by an active control system preventing spoilage, ensuring stable and high quality raising output and cutting costs. Doctor of Economic Sciences A.A. Zvorykin delivered a report on "Complete Mechanization and Automation of Production Processes in Machine Building, and its Economic Effect." Candidate of Technical Sciences, N.G. Latyshev discussed "Automation of Production Processes and its Effect at Series Production Plants". The participants of the seminar approved a recommendation in which it was noted that though there is a considerable success in automation and mechanization in mass production, too little attention is paid to it in series and small-lot production, particularly in the use of old machine tools.

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25(6)

S/028/60/000/03/024/029  
D041/D006

AUTHOR:

Kolotilova, Yu.V.

TITLE:

The Typification of Technological Processes in Machine Building

PERIODICAL:

Standartizatsiya, 1960, <sup>24</sup>№ 3, pp 57-58 (USSR)

ABSTRACT:

In January 1960, the Moskovskiy dom nauchno-tekhnicheskoy propagandy im. F.E. Dzerzhinskogo (Moscow House of Scientific Technical Propaganda imeni F.E. Dzerzhinskiy) conducted a seminar on the typification of technological processes in machine building. The following lectures were given: Professor F.S. Dem'yanyuk, Doctor of Technical Sciences, - "The Scientific Foundations of the Typification of Technological Processes"; I.S. Gindin - "Fundamentals of Group Machining"; I.M. Dvoretzkiy, Engineer, - "The Typification of Technological Processes and the Improvement of Technological Documentation"; M.O. Yakobson, Doctor of Technical Sciences, lectured

Card 1/2

28(1)  
30(7)

S/028/60/000/05/022/027  
D044/D006

AUTHOR: Kolotilova, Yu.V.

TITLE: Automation of Equipment by Means of a Hydraulic Follow-Up Drive

PERIODICAL: Standartizatsiya, 1960, Nr 5, p 54 (USSR)

ABSTRACT: The article covers a seminar under the title "Equipment Automation by Means of Applying Hydraulic Follow-Up Drive" jointly organized by the Moskovskiy Dom nauchno-tekhnicheskoy propagandy im. F.E. Dzerzhinskogo (Moscow House of Scientific and Technical Publicity imeni F.E. Dzerzhinskiy) and the Gosudarstvennyy komitet Soveta Ministrov SSSR (State Committee of the Ministers Council of the USSR). The seminar was attended by more than 350 people and 18 reports were delivered. The following specialists lectured on themes indicated: Professor Doctor of Technical Sciences Ye.M. Khaymovich on "The Hydraulic Follow-Up Drive - an Effective Means for The Automation of Equipment and Modernization"; Candidate of Technical Sciences B.L. Korobochkin on "Single-Coordinate Hydraulic Follow-Up Drives and Their Scope of Application"; Candidate of

Card 1/2

KAZANTSEV, Nikolay Dmitriyovich, doktor yurid. nauk, prof.;  
KOLOTINSKAYA, Yelena Nikolayevna, kand. yurid. nauk;  
RYGALIN, A.G., red.; SHCHEDRINA, N.L., tekhn. red.

[Legal aspects of conservation in the U.S.S.R.; a textbook]  
Pravovaia okhrana prirody v SSSR; uchebnoe posobie. Moskva,  
Gosiurizdat, 1962. 132 p. (MIRA 15:11)  
(Conservation of natural resources)

KOLOTINSKAYA, Yelena Nikolayevna; KAZANTSEVA, N.D., prof., red.;  
DANIL'CHENKO, O.P., red.; YERMAKOV, M.S., tekhn. red.

[Legal aspects of conservation in the U.S.S.R.; a textbook  
for correspondence students of state universities] Pravoayaia  
okhrana prirody v SSSR; uchebnoe posobie dlia studentov-  
zaochnikov gosudarstvennykh universitetov. Pod red. N.D.  
Kazantseva. Moskva, Izd-vo Mosk. univ., 1962. 193 p.

(MIRA 15:11)

(Conservation of natural resources)

KOLOTIRKIN, I.M.

Anion influence on the kinetic dissolution of metals. *Analele chimie*  
18 no.1:99-114 Ja-Mr '63.

KOLCETI, A. A.

Delinarskiy, Yr. K. and Kolotti, A. A. "The decomposition potential of aluminum iodide", Ukr. khim. zhurnal, 1948, Issue 1, p. 124-28, - Bibliog: 6 items.

SO: U-3042, 11 March 53, (Ietopis 'nykh Statey, No. 10, 1949).

KOLOTTI, A. A.

Delimarskiy, Yu. K., Ryabokon', V. D. and Kolotti, A. A.

"The decomposition potentials of the chlorides of metals in  
a molten mixture of NaCl, KCl and SrCl as a solvent,"

Ukr. khim. zhurnal, Vol XV. Issue 1, 1949, p. 149-58, - Bibliog: 11 items.

SO: U-5241, 17 December 1953, (Letopis 'Zhurnal 'nykh Statey, 26, 1949)



KOLOTTI, A.A.

6

Decomposition potentials of molten iodides. I. De- from the cathode source and above 650°C

1977 Jan 13, ~~1977~~ C.A. 42, 2180g

Cu 3.10, Na 2.18, Mg 1.44, Mn 0.91, Ti 0.84, Al 0.68,  
Zn 0.71, Cl 0.60, Ag 0.92

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

KOLOTTI, A. A.

USSR/Chemistry - Iodides  
Chemistry - Dissociation

Jan 49

Dissociation Potentials of Molten Iodides: II. Dissociation Potentials of Metal in Molten Sodium Iodide Employed as a Solvent," Yu. K. Delimarskiy, A. A. Kolotti, Inst of Gen and Inorg Chem, Acad Sci Ukrainian SSR, Kiev. 3 1/2 pp

"Zhur Fiz Khim" Vol XIII, No 1

Determines dissociation potentials of TlI, MnI<sub>2</sub>, BeI<sub>2</sub>, PbI<sub>2</sub>, AlI<sub>3</sub>, CdI<sub>2</sub>, AgI<sub>2</sub>, SnI, CuI, CoI<sub>2</sub>, BiI<sub>3</sub>, and SbI<sub>3</sub> in molten sodium iodide as a solvent. Dissociation potentials of iodides in NaI are higher than in pure fused salts. Values of dissociation potentials of TlI, ZnI<sub>2</sub>, PbI<sub>2</sub>, and HgI<sub>2</sub> are particularly high and can be explained by complex formation in fusions. Gives two diagrams on experimental results and two tables on potentials in molten NaI, and electrode potentials at 700° C. Submitted 7 Feb 48.

PA 48/49T22

1ST AND 2ND GROUPS      PROCESSES AND PROPERTIES INDEX      3RD AND 4TH GROUPS

4

**Electrochemical potential series of metals in molten sodium bromide and potassium bromide as solvent.**  
 Yu. K. Delimarskii and A. A. Kolotil. *Zhur. Fiz. Khim.* 23, 339-41(1940); cf. *C.A.* 42, 2180g.—The decomposition potential  $V$  of 5 mol. % solns. of  $\text{CaBr}_2$ ,  $\text{MgBr}_2$ ,  $\text{TlBr}_2$ , and  $\text{SnBr}_2$  in the fused equimol. mixt. of  $\text{NaBr}$  and  $\text{KBr}$  at  $700^\circ$  is 2.80, 1.72, 1.56, and 0.92 v., resp. The temp. coeff.  $\times 10^3$  of  $V$  between  $650$  and  $800^\circ$  is  $-14$ ,  $-10$ ,  $-10$ , and  $-6$ , resp. The standard potentials of metals in  $\text{NaBr} + \text{KBr}$  are different from those in  $\text{H}_2\text{O}$ .  
 J. J. Bikerman

ASM-ISA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND GROUPS      3RD AND 4TH GROUPS

PROCESSES AND PROPERTIES INDEX

4

Decomposition potentials of molten iodides III. The composition potentials of metal iodides in fused aluminum iodide as solvent. Yu. K. Belimarski and A. A. Kolotti. *Zhur. Fiz. Khim.* 23, 437-49(1949); cf. C.A. 43, 13811. The decompn. potentials  $V$  of 5% mol. solns. in  $AlI_3$  in  $CO_2$  atm. between graphite electrodes at  $380^\circ$  are  $AlI_3$ , 0.86,  $AgI$  0.80,  $PbI_2$  0.78,  $CuI$  0.72,  $BiI_3$  0.44,  $SbI_3$  0.50,  $HgI_2$  0.42,  $CoI_2$  0.30, and  $NiI_2$  0.20 v.; no  $V$  is observed for  $SnI_4$ . In 5 mol. % solns. in  $NaAlI_4$ , the  $V$  is 1.08, 0.94, 0.82, 0.72, 0.54, 0.39, 0.46, 0.50, and 0.38 at  $400^\circ$  and 0.91, 0.82, 0.70, 0.61, 0.46, 0.30, 0.38, 0.38, and 0.30 v., resp., at  $600^\circ$ ; for  $CdI_2$ ,  $V = 1.03$  and 0.87, and for  $SnI_4$ , 0.80 and 0.68 at  $400^\circ$  and  $600^\circ$ , resp. The order of metals is different in  $AlI_3$  and  $NaAlI_4$ . The electrode potentials usually are more neg. in  $NaAlI_4$  than in  $NaAlCl_4$ , because of the different deformations of metal cations by different halogen ions.

I. I. Bikerman

A33-514 METALLURGICAL LITERATURE CLASSIFICATION

SEARCHED	INDEXED	SERIALIZED	FILED
SEP 19 1951	SEP 19 1951	SEP 19 1951	SEP 19 1951

KOLOTTI, A.

USSR/Chemistry - Metallurgy, Aluminum Jun 50

"Electrode Potential of Aluminum in Melted Halides,"  
Yu. K. Delimarskiy, A. A. Kolotti, Inst of Gen and  
Inorg Chem, Acad of Sci Ukrainian SSR

"Ukrainskiy Khimicheskiy Zhurnal" Vol XVI, No 1,  
pp 119-126

The electrode potentials of aluminum are detd for various melted halides in relation to a sodium electrode taken as zero. The relationship between the magnitude of the aluminum electrode potential and the nature of the anions present in the melted electrolyte is established. On changing from chloride to bromide and iodide, the electrode potential of aluminum becomes more pos.

21276

KOLOTTI, A. A.

Chem. 2<sup>3</sup>

Chem abs. V47  
1-25-54

Electrochemistry

✓ Reversible glass-tin-sodium reference electrodes in fused salts. Yu. K. Dolinarskiĭ, and A. A. Kolotti. *Ukrain. Khim. Zhur.* 16, 433-46 (1950) (in Russian).—The construction and use of a glass-Sn-Na electrode is described. For the cell Sn|glass|Na,  $E = 2.0346$  v. at 500°. In the range 500-600°  $\Delta E/\Delta T = -0.0003$  v./°C. Na-Sn alloys can be substituted for either Sn or Na to give smaller voltages. When Na exceeds 40% in the alloy the voltage of the cell Sn|glass|Na,Sn<sub>n</sub> does not appear to vary appreciably with Na. Na-Sn alloy electrodes are used for measurements of the cells Ag|AgX-NaX|glass|Na,Sn<sub>n</sub>, where X is Cl, Br, or I. With E as an experimentally developed function of % Na for Na|glass|Na,Sn<sub>n</sub>, the electrode potential of Ag is calcd. with reference to Na. The fused salts investigated are, in molar %, 65NaI-5AgI; 60NaI-50AgI; 60NaBr-50AgBr; 60NaCl-50AgCl. Voltages are reported for the temp. range 630-700°. The most generally used Na-Sn alloy contains 30.79% Na. The p.d. between Na and Ag varies with the compn. of the fused salt electrolyte. C. H. Fuchsman

4-21-54

KOLOTTI, A.A.

DELIMARSKIY, Yu.K.; KOLOTTI, A.A.

Relation of the decomposition potentials of salts to their concentration  
in fused electrolytes. Ukr.khim.zhur.17 no.1:123-135 '51. (MLRA 9:9)

1. Institut obshchey i neorganicheskoy khimii Akademii nauk Ukrainskoy SSR.  
(Salts) (Potential, Theory of)

DELMARSKIY, Yu.K.; KOLOTTI, A.A.

Second potentials in the electrolysis of fused silver halides. Ukrain.  
Khim. Zhur. 17, 877-89 '51. (MLRA 6:4)  
(CA 47 no.22:12041 '53)

1. Inst. Gen. Inorg. Chem., Acad. Sci. Ukr. S.S.R., Kiev.



NOLOTTY, A. A.

2

\*Electrodeposition of Metallic Lithium on the Molten Lead Cathode. A. A. Kolesii (*Ukrain. Khim. Zhur.*, 1952, 18, (6), 667-671).—[In Russian]. K. studied the preparation of Pb-Li alloys (up to 6.9% Li) by electrolysis of the molten eutectic mixture of KCl and LiCl (60 mol.-% LiCl), with a molten-Pb cathode and a graphite anode. Data showing the relation between e.d., temp., time of electrolysis, terminal voltage, Li content of the alloy, and current efficiency are tabulated.—G. V. E. T.

MFT

USSR/Chemistry - Zirconium

Jul-Aug 53

"Potentials of Electrolytic Decomposition of the Systems NaF-ZrF<sub>4</sub> and NaF-ZrF<sub>4</sub>-ZrO<sub>2</sub>," Yu.K. Delimarskiy, A.A. Kolotiy, V.A. Lapa, Inst of Gen and Inorg Chem, Acad Sci Uk SSR

Ukrain Khim Zhur, Vol 19, No 4, pp 372-376.

Although Zr is commonly produced by reducing fluorozeirconates with Na, it can also be obtained industrially by electrolyzing fused fluorides.

With the aid of I-V curves, the decomp potentials were measured at different temps. It was

268T11

established that the decomp potential of Na fluorozeirconate drops with rising temps and rises when the concn of NaF is increased. In the I-V curves for the ternary system NaF-ZrF<sub>3</sub>-ZrO<sub>2</sub>, only one bend is present. In the electrolysis of both mixts, Zr was deposited at the cathode.

*Evaluation B-77406*

268T11

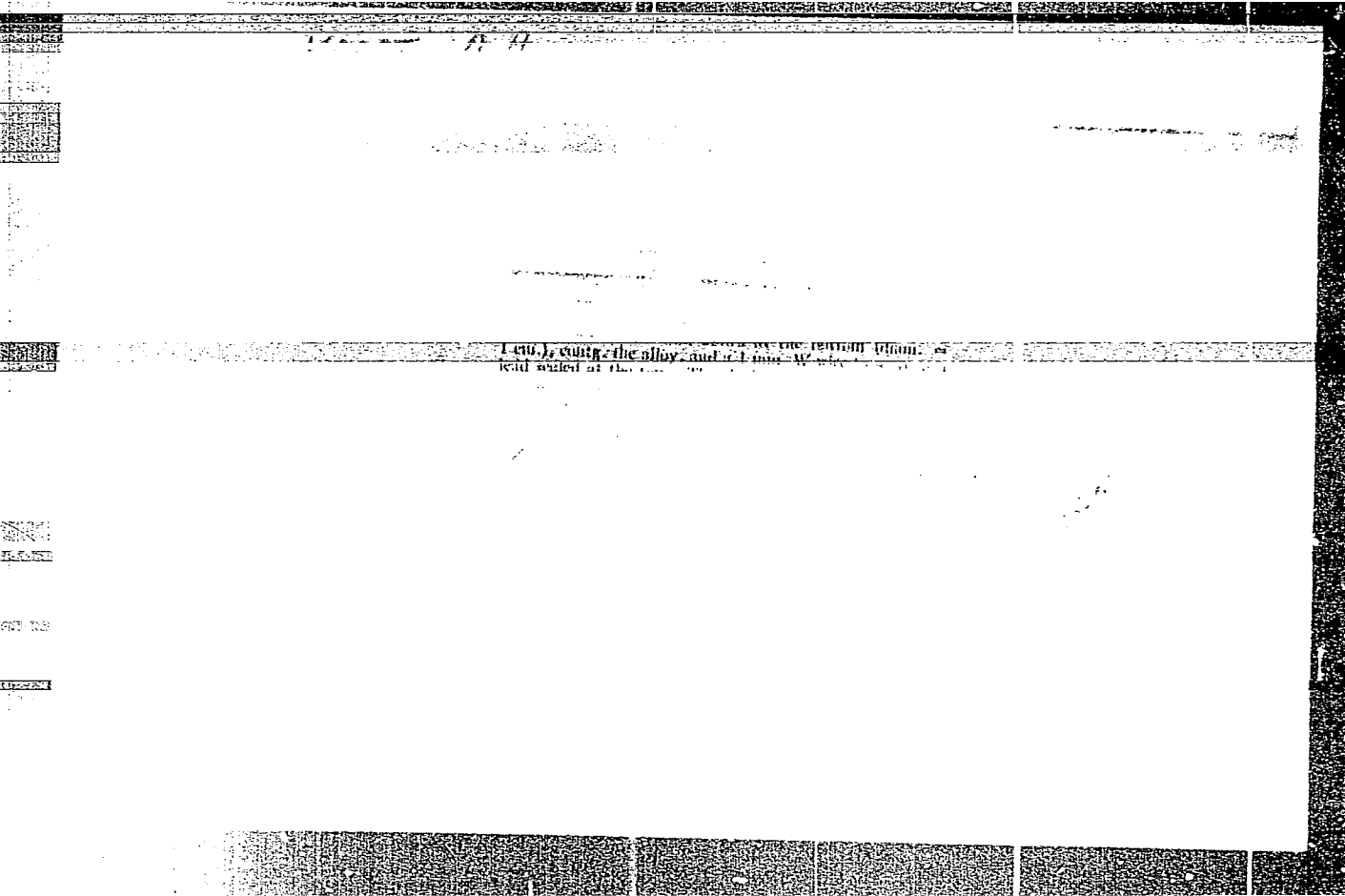
KOLOTIY, A. A.

Dissertation: "Standard Electrode for Molten Salts and Its Application." Cand  
Chem Sci, Inst of General and Inorganic Chemistry, Acad Sci Ukrainian SSR, 1 Jul  
54. (Pravda Ukrainy, Kiev, 23 Jun 54)

SO: SUM 318, 23 Dec 1954

KOLETIV, A.A.

3370 AKA 19-2679  
RESEARCH OF THE GLASS-TIN-SODIUM...  
...MOLYBDATE SALTS...  
...Khm. Zhur. 1958-1960...  
...sodium electrode is...  
...of Na<sup>+</sup> in molten...  
...the range of concentrations...  
...and higher...



KOLOTIY, A. A.

USSR/ Chemistry      Physical chemistry

Card            : 1/1      Pub. 1147 - 1/25

Authors        : Delimarskiy, Yu. K., and Kolotiy, A. A.

Title           : Electrochemical investigation of the Sn - Na system

Periodical     : Zhur. fiz. khim. 28/7, 1169 - 1173, July 1954

Abstract       : Results of electrochemical investigation of a Sn - Na system, are analyzed. The activity and activity coefficients of both components, were determined as functions of molar fractions. Partial molar blending heats were calculated and represented as concentration functions. The chemical processes taking place in the Sn - Na system can be characterized by the curve showing the dependence of thermal coefficients on the composition of the alloy. Five references: 3 USSR and 2 German (1905 - 1951). Tables; graphs.

Institution    : Acad. of Sc. Ukr-SSR, Institute of Gen. and Inorg. Chemistry, Kiev

Submitted      : July 19, 1952

*KOLOTIY, A. A.*

Category: USSR / Physical Chemistry - Electrochemistry

B-12

Abs Jour: Referat Zhur-Khimiya, No 9, 1957, 30142

Author : Kolotiy A.A., Delimarskiy Yu. K.

Inst : not given

Title : Electrochemical Separation of Binary Lead-Copper and Lead-Silver Alloys in Fused Electrolyte

Orig Pub: Ukr. khim. zh., 1956, 22, No 4, 466

Abstract: In continuation of previously published work (RZhKhim, 1956, 42832) a study was made, for the purpose of refining Pb from Cu and Ag, of the electro lysis of fused eutectic mixture  $PbCl_2 - KCl - NaCl$  at different current density  $i$ . As anode were utilized the binary alloys Pb-Ag (0.05 - 10 at. % Ag) and Pb-Cu (0.05 - 5 at. % Cu). Cathode and anode metals were held in refractory test tubes with lateral openings. The electrolyte was contained in a porcelain crucible. It was found that with increase of Cu and Ag content of the anode metal by 10 times the amount of admixtures in the cathode metal increases, respectively, by 10 and 4 times. On increase of  $i$  at the

Card : 1/2

-13-

*Inst. Chem. and Inorg. Chem AS Ukr SSR*

AD-PT-IV, A A

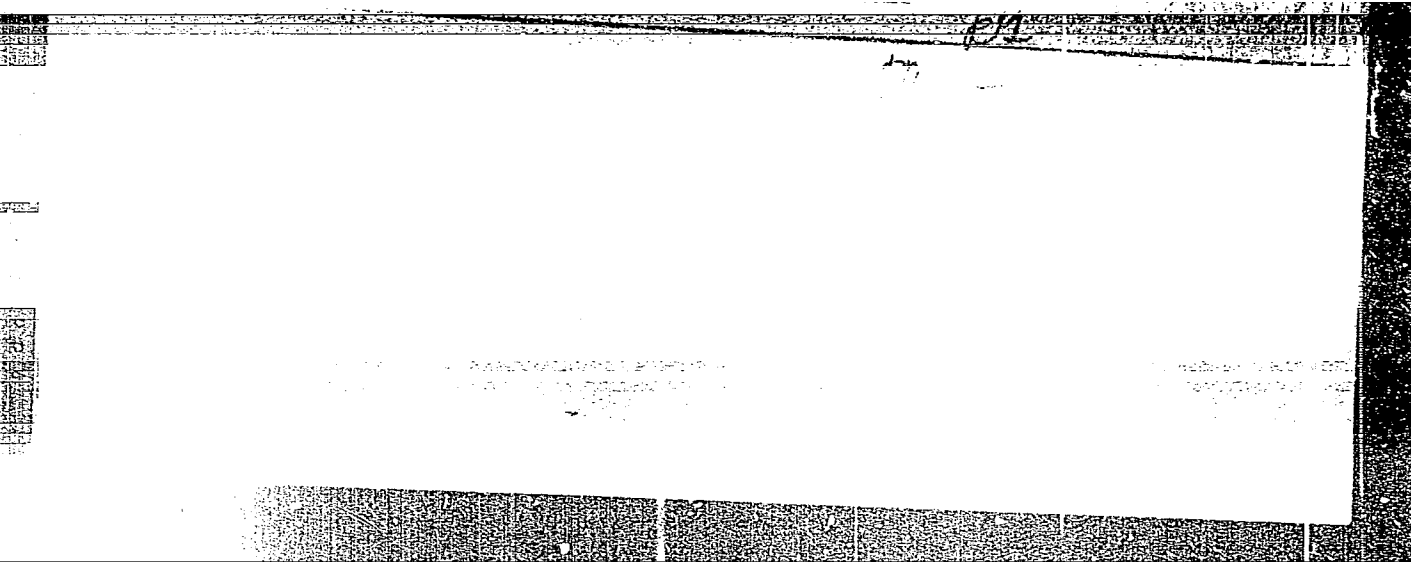
Electrochemical separation of binary alloys of lead, tin, and zinc in fused electrolytes. *Ukrain. Khim. Zhur.* 22, 3 (1976) in Russian. — Binary alloys of Pb with Sn and Zn were used as anodes in fused  $PbCl_2-NaCl-KCl$  eutectic. At cathodic c. d. (I) of 2.3d amp./sq. cm. the amount of Zn deposited on the cathode equals the mole % of  $PbCl_2$  in the electrolyte. At I = 0.19 amp./sq. cm. the concn. of Sn and Zn approach those present at equil. On slow electrolysis the anode is depleted of Sn which is divided between the cathode and the electrolyte. Zn on slow electrolysis is almost completely removed from the electrodes by reaction with the electrolyte, so Zn impurities can be removed from the alloy. Increasing I, the amt. of Zn deposited increases owing to a concn. polarization.

2 41-80



"APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000823930007-9



APPROVED FOR RELEASE: 09/18/2001

CIA-RDP86-00513R000823930007-9"

KOLOTIY, A.A.

Potentiometry of melts containing silver and sodium halides. Zhur.  
fiz.khim. 30 no.3:508-514 Mr '56. (MLBA 9+8)

1. Institut obshchey i neorganicheskoy khimii Akademii nauk USSR,  
Kiyev.

(Potentiometric analysis) (Halides)

Классификация

Composition of the system  
LiCl and BaCl<sub>2</sub>  
The p.d. curve of the LiCl-BaCl<sub>2</sub> system was measured at 630-700°  
The p.d. values decreased and the 2nd break in the current  
p.d. curve of the LiCl-BaCl<sub>2</sub> system was at 620° and

KOLOTIY, A. A., GITMAN, Ye. B., DELIMARSKY, Yu. K., PANCHENKO, I. D.

"Electrolytic Production of Lead by Electrolytes of Fused Salts"

IONKh Ac. Sc. Ukr SSR.

report submitted at a conference on new methods of lead production from concentrates,  
Gintsvetmet (State Inst. Non-Ferrous Metallurgy), Moscow 22-25 June 1958.

(for entire conf. see card for LIDOV, V. P.)

DELIMARSKIY, Yu.K.; KOLOTIY, A.A.

Quartz reference electrode for fused salts. Ukr. khim. zhur. 24  
no. 2:146-151 '58. (MIRA 11:6)

1. Institut obshchey i neorganicheskoy khimii AN USSR.  
(Electrodes)  
(Quartz)  
(Salts)

KOLOTIY, A.A.

Using silver and silver chloride reference electrodes in fused salts.  
Ukr.khim.shur. 24 no.6:712-717 '58. (MIRA 12:3)

1. Institut obshchey i neorganicheskoy khimii AN USSR.  
(Electrodes) (Salts) (Electromotive force)

5(4) PHASE I BOOK EXPLOITATION NOV/7216

Soveshchaniye po elektrokhimii. 4th, Moscow, 1956.

Trudy...i [sbornik] (Transactions of the Fourth Conference on Electrochemistry; Collection of Articles) MVD-VAN SSSR, 1959. 360 p. Zhurnal, 1959. 2, 500 copies printed. Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh nauk.

Editorial Board: A.M. Frumkin (Resp. Ed.), Academician, O.A. Yasin, Professor, S.I. Zhdanov (Resp. Secretary), B.M. Kabanov, Professor, S.I. Zhdanov (Resp. Secretary), B.M. Kabanov, Professor, Ya. M. Kolotiy, Doctor of Chemical Sciences, V.V. Losev, P.D. Lukotsev, Professor, Z.A. Solov'yeva, V.V. Stender, Professor, and G.M. Floranovich; Ed. of Publishing House M.D. Isgorov; Tech. Ed.: I.A. Prusakova.

PURPOSE: This book is intended for chemical and electrical engineers, physicists, metallurgists and researchers interested in various aspects of electrochemistry.

COVERAGE: The book contains 127 of the 138 reports presented at the Fourth Conference on Electrochemistry sponsored by the Department of Chemical Sciences and the Institute of Physical Chemistry, Academy of Sciences, USSR. The collection pertains to different branches of electrochemical kinetics, double layer, industrial electrolytic processes in metal electroplating, the end of each division. Bridged discussions are given at the end of each division. The majority of references included here have been published in periodical literature. No personalities are mentioned. References are given at the end of most of the articles.

Golubskiy, Yu. P. (Institut soobshchii i analiticheskoy khimii AN SSSR) i I. Vernadskogo - Institute of Geochemistry and Analytical Chemistry i I. Vernadskiy, Academy of Sciences, USSR). Diffusion of Electrolytes and the Polarographic Method 677

Kolobov, I. K. and K. A. Zhigalova (Institute of Physical Chemistry, Academy of Sciences, USSR). Diffusion of Oxygen Through Thin Films of Electrolytes 684

Discussion (O. S. Kuznetsov, Yu. A. Chizmadzhev, Yu. A. Vdovin, O. S. Khachaturyan and contributing authors) 689

PART VIII. ELECTROCHEMICAL PROCESSES IN NONFERROUS METALLURGY 695

Stander, V. I. (Dnepropetrovsk Institute of Chemical Technology and Institute of Chemistry, Academy of Sciences, USSR). Electrolysis as a Means of Combining of Metals With Amalgams 697

Card 27/34

Several Metallurgical and Chemical Production Processes (Some New Processes of Hydroelectric Metallurgy) 697

Kozlovskiy, M. F. (Kazakh State University, Academy of Sciences, KazSSR). Some Problems of Amalgam Metallurgy - Cementation of Metals With Amalgams 704

Delimarskiy, Yu. K., R. F. Markov, I. D. Panchenko, Ya. B. Nizman, and A. A. Kolotiy (Institute of General and Inorganic Chemistry, Academy of Sciences, URSSR). Electrolytic Purification of Lead from Fused Salts 710

Chizhikov, D. M., and V. M. Kovzina (Institute of Metallurgy, Academy of Sciences, USSR). Investigation of the Potentials and Anodic Polarization of Metallic Sulfides and Their Alloys 715

Lewis, P. I., and I. A. Ruzman (Deceased) (Vsesoyuznyy nauchno-issledovatel'skiy institut tsvetnykh metallov, All-Union Scientific Research Institute of Nonferrous Metals). Special 723

Card 28/34

Features of the Anode Process During the Purification of a Copper-Nickel Anode in a Sulfate-Chloride Electrolyte 720  
Zaretzkiy, S. A., I. G. Zharnitskiy (Deceased), and I. A. Bogdanova. Anodic Behavior of Manganese and Its Alloys 723

KOLOTIY, A. A.

KOLOTIY, A. A.

S/073/60/026/001/003/021  
B004/B054

AUTHORS: Delimarskiy, Yu. K. and Kolotiy, A. A.

TITLE: Anodic Dissolution of Lead Alloys With Antimony, Bismuth, and Silver in Fused Alkali

PERIODICAL: Ukrainskiy khimicheskiy zhurnal, 1960, Vol. 26, No. 1, pp. 16-24

TEXT: The authors studied the electrolytic separation of the anode residue which is formed in the electrolytic refining of lead, and contains, besides lead, 1-13% of Bi, 0.6-35% of Sb, and about 0.05% of Ag. The electrolytic experiments were made in molten NaOH. Pure Pb, Bi, Pb-Sb alloy, Pb-Bi alloy, or a quaternary Pb-Sb-Bi-Ag alloy served as anodes. The interaction of Pb, Sb, and Pb-Sb alloy (with 1% and 35% of Sb) with the molten NaOH was studied. The authors found a poor solubility of Pb and, in the alloy with 1% of Sb, an extraction of Sb from the alloy. The 35% Sb alloy, however, was stable to NaOH. Electrolysis of the two Pb-Sb alloys was conducted in the electrolyzer shown by the figure. The Pb-Bi and Pb-Ag alloys were stable to NaOH. These alloys were also dissolved anodically. To dissolve

Card 1/4



Anodic Dissolution of Lead Alloys With Antimony, S/073/60/026/001/003/021  
Bismuth, and Silver in Fused Alkali B004/B054

the lead completely from alloys rich in bismuth, the authors finally studied the interaction between Pb-Bi alloys and a  $\text{Bi}_2\text{O}_3$  - NaOH melt, and determined the solubility of  $\text{Bi}_2\text{O}_3$  in NaOH. The following was found: 1.4% by weight of  $\text{Bi}_2\text{O}_3$  dissolved at 315°C; 6.4% by weight at 483°C; and 10.1% by weight at 740°C. A Pb-Bi alloy with 4% of Bi can be concentrated to 50% of Bi by means of the  $\text{Bi}_2\text{O}_3$ -NaOH melt. On the basis of experimental data, the authors concluded: Sb must be removed from alloys poor in Sb at low anodic amperage, since otherwise Pb and Bi are also dissolved. In alloys rich in antimony, a high current density must be applied at the beginning to intensify the process. After a decrease of the Sb content in the alloy, low current density is applied. Antimony can be fully removed from lead alloys by anodic dissolution. After removal of Sb, the alloy can be enriched in silver by anodic dissolution of Pb and Bi. By complete removal of Pb, possibly with the use of a  $\text{Bi}_2\text{O}_3$ -NaOH melt, the alloy can be enriched to 40% of Ag. The complete separation of silver from bismuth must be conducted by known oxidation methods. The cathodic process during the

Card 2/4

Anodic Dissolution of Lead Alloys With Antimony, S/073/60/026/001/003/021  
Bismuth, and Silver in Fused Alkali B004/B054

anodic separation of the Pb-Sb-Bi-Ag alloy was not investigated in detail. It was observed that only hydrogen was separated by low current densities. At high current densities, Pb, Bi, and also Na can be precipitated as  $\text{Na}_3\text{Bi}$ . The formation of  $\text{H}_2$  and  $\text{Na}_3\text{Bi}$  reduces the current yield of Pb and Bi on the cathode. A complete separation of lead from bismuth in an alkaline melt could not be attained. There are 1 figure, 6 tables, and 12 references: 5 Soviet, 3 US, and 4 German.

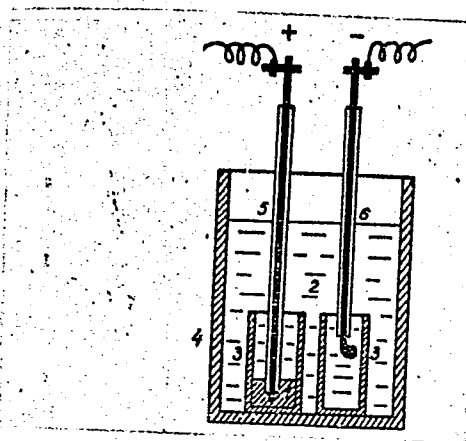
ASSOCIATION: Institut obshchey i neorganicheskoy khimii AN USSR  
(Institute of General and Inorganic Chemistry of the  
AS UkrSSR)

SUBMITTED: June 19, 1958

Legend to the figure: 1: metallic anode, 2: NaOH melt, 3,4: corundum beaker, 5: current supply to the anode, iron bar in corundum casing, 6: cathode, iron bar in corundum casing with shovel-shaped end.

Card 3/4

S/073/6C/026/001/003/021  
B004/B054



Card 4/4

DELIMARSKIY, Yu. K.; KOLOTIY, A. A.; GRISHCHENKO, V. F.

Electrode function of platinum in fused salts. Part 1: Potassium and chlorine functions and the eigenfunction of platinum. Ukr. khim. zhur. 27 no.6:760-766 '61. (MIRA 14:11)

1. Institut obshchey i neorganicheskoy khimii AN USSR.  
(Electrodes, Platinum)  
(Salts)

KOLOTIY, A.A.; DELIMARSKIY, Yu.K.

Electrode function of platinum in melts. Part 2. Oxygen  
function of platinum. Ukr. khim. zhur. 28 no.1:53-59 '62.  
(MIR: 16:8)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

KOLOTIY, A.A.

Mixed electrode functions of platinum and other metals in fused salts. Ukr.khim.zhur. 28 no.2:188-192 '62. (MIRA 15:3)

1. Institut obshchey i neorganicheskoy khimii AN USSR.  
(Electrodes, Platinum) (Salts) (Electrochemistry)

DELIMARSKIY, Yu.K., akademik; KOLOTIY, A.A., kand.khimicheskikh nauk;  
TKACHEVA, E.V.

Equal value potentials of iron and tin in  $\text{FeCl}_2 - \text{KCl}$  and  $\text{SnCl}_2 - \text{KCl}$  melts. Sbor. trud. TSNIICHM no.28:166-172 '62. (MIRA 15:11)

1. AN UkrSSR.

(Tin plating) (Fused salts--Electric properties)

KOLOTIY, A.; DELIMARSKIY, Yu.K.

Electrochemical study of the system  $\text{SnCl}_2 - \text{KCl}$ . Zhur.neorg.khim.  
8 no.1:163-166 Ja '63. (MIRA 16'5)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.  
(Fused salts) (Electrochemical analysis)



KOLOTIY, A.A.; TKACHEVA, E.V.

Decomposition potentials of the systems  $\text{SnCl}_2 - \text{KCl}$  (50 mol. %),  
 $\text{FeCl}_2 - \text{KCl}$  (50 mol. %), and  $\text{SnCl}_2 - \text{KCl} - \text{FeCl}_2$  (61,5;33,5,  
and 5 mol. %) in the fused state. Ukr.khim.zhur. 291 no.1:39-42  
'63. (MIRA 16:5)

1. Institut obshchey i neorganicheskoy khimii AN Ukr.SSR.  
(Fused salts--Electric properties)  
(Electromotive force)

KOLOTIY, A.A.

Glass electrode in fused salts. Ukr. khim. zhur. 29 no.11:  
1169-1172 '63. (MIRA 16:12)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

DELIMARSKIY, Yu.K.; KOLOTYY, A.A.

Equilibrium potentials of iron and tin in molten  $\text{FeCl}_2 - \text{KCl}$   
and  $\text{SnCl}_2 - \text{KCl}$  and the equilibrium constant of the reaction  
 $\text{Sn} + \text{FeCl}_2 \rightleftharpoons \text{Fe} + \text{SnCl}_2$ . Zhur. prikl. khim, 36 no.9:1929-  
1932 D '63. (MIRA 17:1)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

KOLOTIY, A.A., kand.tekhn.nauk; TKACHEVA, E.V., inzh.

Potentials of the decomposition of the systems  $\text{SnCl}_2 - \text{KCl}$  [50 % (mol.)],  $\text{FeCl}_2 - \text{KCl}$  [50 % (mol.)], and  $\text{SnCl}_2 - \text{KCl} - \text{FeCl}_2$  [61.5: 33.5 and 5 % (mol.)] in a fused state. Sbor. trudy TSNIIOHM (MIRA 17:4) no.34:22-27 '63.

KOLOTIY, A.A., kand.tekhn.nauk; DELIMARSKIY, Yu.K., akademik

Electrochemical investigation of the system  $\text{SnCl}_2 - \text{KCl}$ . Sbor.  
trud. TSNIICHM no.34:28-33 '63. (MIRA 17:4)

KOLOTIY, A.A., kand. tekhn. nauk

Tin losses in a fused mixture  $\text{SnCl}_2 - \text{KCl}$ . Sbor. trud. TSNIICHM  
no. 34:34-39 '63. (MIRA 17:4)

KOLOTIY, A.A.

Electrochemical investigation of the system Sn - SnCl (KCl).  
Ukr. khim.zhur. 29 no.9:939-945 '63. (MIRA 17:4)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

KOLOTIY, A.A.; KUCHERENKO, V.L.

Losses of tin and lead during dissolution in the systems\* of  
fused salts  $\text{SnCl}_2$  - (KCl) and  $\text{PbCl}_2$  - (KCl - NaCl).  
Ukr. khim. zhur. 2 30 no.1:57-59 '64. (MIRA 17:6)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.



DELIMARSKIY, Yu.K. [Delimars'kyi, IU.K.], akademik; KOSMATYY, Yu.Ye.  
[Kosmatyi, IU.IE.]; KOLOTIY, A.A.

Platinum and platinum-glass reference electrodes for silicate-  
chloride and chloride melts. Dop. AN URSR no.9:1192-1194 '64.  
(MIRA 17:11)

1. AN UkrSSR (for Delimarskiy).

KOLOTIY, A.A.

Method of determining the decomposition voltage of fused salts. Zmur. fiz. khim. 38 no.5:1370-1371 My '64.

(MIRA 18:12)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.  
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TITLE: Electrochemical properties of glass membranes in a  $PbCl_2$ -NaCl melt

SOURCE: Ukrainskiy khimicheskii zhurnal, v. 32, no. 7, 1966, 673-675

TOPIC TAGS: electrochemistry, glass property, glass electrode

ABSTRACT: The composition of a glass has a substantial influence on its electrochemical properties, which plays an important role in the design of glass reference electrodes for molten salts. An attempt was made to simplify the method of studying the electrochemical behavior of a glass membrane through the use of a platinum-oxygen (air) electrode in  $PbCl_2$ - $NaCl_2$  melts. The electromotive force of the circuit was measured as a function of the composition of the glass, time, and temperature at constant concentrations  $10^{-2}$  and  $3.2 \cdot 10^{-1}$  by weight NaCl in the melt. A decrease in the electromotive force of the circuit was observed with increasing sodium oxide content in the glass. All of the tested glasses but one were characterized by a general drop in the electromotive force with time.

ORIG. art. has: 1 figure, 2 tables and 5 formulas. [JPRS: 38,439]

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KOLOTIY, M. [Kolotii, M.]

Urgent problems. S11'. bud. 11 no.4:6-8 Ap '61.

(MIRA 14:6)

1. Zamestitel' nachal'nika Glavnogo upravleniya sovkhovov pri  
Sovete Ministrov USSR.

(Ukraine--Construction industry)