

Preparation of potassium nitrodichloroamminoplatinite.  
 A. D. Gel'man and L. N. Eschen, *Doklady Akad. Nauk*  
 S.S.S.R. 107, 835 (1958); *Chem. Abstr.* 54, 4233d. To a  
 warm soln. of 1.1827 g.  $K_2[Pt(NH_2)Cl_2]$  in 30 ml.  $H_2O$  was  
 added 0.2242 g.  $NaNO_2$  in the least possible vol. of  $H_2O$ .  
 The color of the soln. turned from orange to light yellow,  
 indicating the formation of  $K_2[Pt(NH_2)ClNO_2Cl]$ . The soln.  
 was treated with  $Pt(NH_3)_2Cl_2$  yielding yellow-orange  
 $[Pt(NH_3)_4][Pt(NH_2)ClNO_2Cl]$ . This product (0.8204 g.) was  
 ground thoroughly with 0.3608 g.  $K_2[PtCl_4]$  and treated with  
 3 ml. hot  $H_2O$ ; the green ppt. of  $[Pt(NH_3)_4][PtCl_4]$  was  
 sepd. and the filtrate was evapd. first at  $50^\circ$ , then at room  
 temp. to give a sticky yellow solid which after repeated  
 rubbings with  $EtOH$  yielded 0.471 g.  $K_2[Pt(NH_2)ClNO_2Cl] \cdot$   
 $H_2O$ , which lost  $H_2O$  at  $110^\circ$ . The anhyd. substance readily  
 picked up  $H_2O$  from the air. A completely anhyd. product  
 was obtained only at  $150^\circ$ , but at this temp. the substance  
 begins to melt. The product with pyridine in aq. soln.  
 yields a cis diammine,  $[pyNO_2NH_2ClPt]$ , colorless solid,  
 sparingly sol. in  $H_2O$ .

G. M. Kasalupoff

chem

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5000

7/ The preparation of quadrivalent platinum complex compounds with five and six different substituents in the ligands of the trans and cis configurations. L. N. Esen and A. D. Gol'man. Doklady Akad. Nauk S.S.S.R. 1955, 121 (English translation) (1956). — [PyNH<sub>2</sub>CINO<sub>2</sub>Pt] was obtained by the interaction of [PyNH<sub>2</sub>Cl<sub>2</sub>Pt] with the calculated amt. of NaNO<sub>2</sub>. To a water suspension of the product, Br<sub>2</sub> was added dropwise, with a thorough agitation after each addn. The original mixt. changed through greenish-brown to brilliant yellow; the ppt. was filtered, analyzed, and its compn. was found to be [PyNH<sub>2</sub>CINO<sub>2</sub>Br<sub>2</sub>Pt] (I). One hr was replaced with I by adding KI to a suspension of I in water, the mixt. heated for 20-25 min. on the water bath, the mixt. cooled, filtered, and the ppt. recrystd. from hot soln. Its compn. was found to be [PyNH<sub>2</sub>CINO<sub>2</sub>BrPt] (II). Its structure was confirmed by its method of prepn. and by its reduction to the bivalent Pt compd. [PyNO<sub>2</sub>NH<sub>2</sub>ClPt]. The cis compd. was obtained from the cis-[PyNO<sub>2</sub>NH<sub>2</sub>ClBr<sub>2</sub>Pt] by a similar oxidation with Br<sub>2</sub> and replacing one Br with I: [PyNO<sub>2</sub>NH<sub>2</sub>ClPt]  $\xrightarrow{Br_2}$  [PyNO<sub>2</sub>NH<sub>2</sub>ClBr<sub>2</sub>Pt]  $\xrightarrow{KI}$  [PyNO<sub>2</sub>NH<sub>2</sub>ClBrPt]. The compd. obtained has the compn. of (II), but different phys. properties, therefore they are isomers. Structures are given for 3 stereoisomers of quadrivalent Pt complexes contg. six different ligands.

W. M. Sternberg

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*Eschen*

INSTR. OF PHYSICS,  
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*W. M. Sternberg*

AUTHORS: Essen, L. N., Zakharova, F. A., Gal'man, A. D. SOV/78-3-12-11/36

TITLE: Concerning the Synthesis of Isomers With Six Different Addenda  
(K sintezu izomerov s shest'yu razlichnymi zamestitelyami)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1958, Vol 3, Nr 12,  
pp 2654-2661 (USSR)

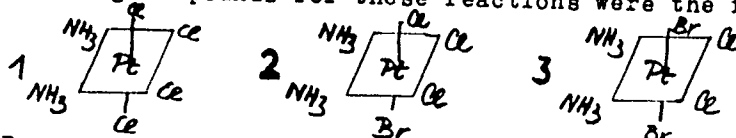
ABSTRACT:  $[PyNH_3BrNO_2ClPt]$  and  $[PyClNH_3NO_2BrPt]$ , two geometric isomers with six different addenda, were synthesized. The starting material for the synthesis of the trans isomers was  $[PyNH_3BrNO_2Pt]$ , containing divalent platinum. The compound was first treated with  $NaNO_2$ , then with chlorine, and finally converted to the trans form  $[PyNH_3BrNO_2ClPt]$  by treating with potassium iodide. This product has a dark green color, and has a solubility in water of 0.05 grams per 100 grams solution. A decomposition with the generation of iodine takes place at  $200^\circ$  when it is heated in open capillary tubes. The synthesis of the cis isomer  $[PyClNH_3NO_2BrPt]$  was carried out using the salt

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Concerning the Synthesis of Isomers With Six Different Addenda

$K [PtPyCl_3]$ . At 40-60°C in aqueous solution the  $NO_2$  group containing an equivalent amount of sodium nitrite was added to the salt. The compound was then oxidized with bromine and the produced salt converted to the cis isomer with six addenda by reaction with potassium iodide. The cis isomer is a fine crystalline powder with a dark brown color, and melts without decomposition at 200°C. It has a solubility in water at 25° of 0.095 grams per 100 grams solution. The syntheses of isomers with two, three, and eight addenda were not successful, because the addition of the  $NO_2$  group to the tetravalent platinum compound is extremely complicated. A few exchange reactions involving simple platinum (IV) compounds were carried out. The starting compounds for these reactions were the following:



By reacting potassium bromide with the  $[(NH_3Cl)_2Cl_2Pt]$  salt in the ratio 1:1 the displacement of one chlorine in the co-

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Concerning the Synthesis of Isomers With Six Different Addenda

ordinates Cl-Pt-Cl takes place. By reacting 2 moles of KBr with one mole of  $[(\text{NH}_3\text{Cl})_2\text{Cl}_2\text{Pt}]$  an exchange of the two chlorine atoms with bromine takes place under development of  $[(\text{NH}_3\text{Cl})_2\text{Br}_2\text{Pt}]$ . The bromine ion in the coordinates Br-Pt-Br could not be displaced by reaction with KCl. The experimental results show that chlorine and bromine have different coordination affinities in the inner spheres of tetravalent platinum compounds. An exchange of chlorine and bromine with the  $\text{NO}_2$  group in the coordinates Br-Pt-Br, Br-Pt-Cl, and Cl-Pt-Cl did not occur. The course of the exchange reactions in the inner spheres of tetravalent platinum compounds is dependent upon the various coordination mobilities of the addenda. There are 11 Soviet references.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry of the Academy of Sciences, USSR)

Card 3/4 :

5(4)

AUTHOR:

Essen, L. N.

SOV/20-123-3-22/54

TITLE:

The Production of Differently Substituted Triacidotriamines of  
Quadrivalent Platinum (Polucheniye raznozameshchennykh tri-  
atsidotriaminov chetyrehvalentnoy platiny)

PERIODICAL:

Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 3, pp 487-489  
(USSR)

ABSTRACT:

The author previously (Refs 1-4) described methods of synthesis of 5 (of among 15 theoretically possible) isomers of the composition  $[PyNH_2ClBrJNO_2Pt]$ . At present it is of interest to determine the optic isomerism for compounds of the type mentioned. The cleavage of the complex non-electrolytes into optical antipodes, however, meets with considerable difficulties. The most expedient way was to split the soluble compounds mentioned in the title by an optically active acid. The production of these substances under consideration of the literature (Refs 5-7) is preliminarily described. The synthesis is completed in 3 stages: 1) production of differently substituted triamines of the bivalent platinum; 2) conversion of these triamines into triamines of the 4-valent platinum; 3) substitution

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SOV/20-123-3-29/54

## The Production of Differently Substituted Triacidotriamines of Quadrivalent Platinum

on the 3rd coordinate. The author succeeded in producing 2 differently substituted triacidotriamines of the 4-valent platinum: a)  $[\text{PyNH}_3\text{EtNO}_2\text{ClBrPt}]\text{Cl}$ , where Et - ethylamine ( $\text{C}_2\text{H}_5\text{NH}_2$ ) and b)  $[\text{PyNH}_3\text{MeNO}_2\text{BrClPt}]\text{Br}$ , where Me - methylamine ( $\text{CH}_3\text{NH}_2$ ). Above all triamines of the 2-valent platinum  $[\text{PyNH}_3\text{EtNO}_2\text{Pt}]\text{Cl}$  and  $[\text{PyNH}_3\text{EtClPt}]\text{Cl}$  were produced for this purpose. As initial material a triamine had to be chosen which contains a nitro group since the inclusion of the nitro group into the compounds of the 4-valent platinum is rather difficult. Therefore, the triamine produced was oxidized by chlorine. Hereby the hitherto colorless solution becomes yellow. By evaporation, a yellow crystalline compound  $[\text{PyNH}_3\text{EtNO}_2\text{Cl}_2\text{Pt}]\text{Cl}$  - a chloride containing crystal water, was separated. The last stage of the synthesis was completed by heating (for 1.5 hours) with potassium bromide on the water bath. On this occasion the solution turned bright-yellow. The resulting substance is  $[\text{PyNH}_3\text{EtNO}_2\text{ClBrPt}]\text{Cl}$ . The further produced triamine was

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The Production of Differently Substituted Triacidotriamines of Quadrivalent Platinum

$[\text{PyNH}_3\text{MeNO}_2\text{BrClPt}] \text{Br}$ . The production of these two compounds permits experiments regarding the cleavage of differently substituted compounds of 4-valent platinum into optic antipodes as it is predicted by the coordination theory. There are 7 Soviet references.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry, AS USSR)

PRESENTED: July 8, 1958, by V. I. Spitsyn, Academician

SUBMITTED: August 8, 1958

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ESSEN, L.N.; ALEKSEYEVA, D.P.

Synthesis of Pt triacidotriamines with six different substituents  
in the inner coordination sphere. Zhur.neorg.khim. 6 no.4:857-  
862 Ap '61. (MIRA 14:4)

1. Institut fizicheskoy khimii AN SSSR.  
(Platinum compounds)

GEL'MAN, A.D.; ESSEN, L.N.

Kinetics of substitution reactions in the inner sphere of complex molecules. Dokl. AN SSSR 138 no.5:1095-1098 Je '61.

(MIRA 14:6)

1. Institut fizicheskoy khimii Akademii nauk SSSR. Predstavleno akademikom V.I.Spitsynym.

(Chemical reaction, Rate of) (Substitution (Chemistry))

ESSEN, L.N.; ALEKSEYEVA, D.P.

Preparation of mixed oxalate-carbonate complex compounds of thorium. Dokl. AN SSSR 146 no.2:380-382 S '62. (MIRA 15:9)

1. Institut fizicheskoy khimii AN SSSR. Predstavleno akademikom V.I. Spitsynym.

(Thorium compounds)

1-10786-0

EWI(m)/BDS AFFTC/ESD-3 RM

S/020/63/149/005/010/018

61  
60

AUTHOR: Gel'man, A. D., Essen, L. N., Zakharova, F. A., Alekseyeva, D. P.,  
and Orlova, M.

TITLE: The production of oxalate-sulfite and sulfite complex compounds  
of thorium and uranium (IV)

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 149 , no. 5, 1963, 1071-1073

TEXT: The object of this investigation was to isolate and investigate previously unknown complex compounds of thorium and uranium (IV) with oxalate and sulfite ions. The starting materials were thorium oxalate and sodium sulfite. Thorium oxalate at room temperature dissolved satisfactorily in concentrated solutions of sodium sulfite, thus attesting to the formation of complex compounds. Upon pouring the resulting solution into alcohol, the complex segregates out in the form of a spiro-shaped mass which is transformed into a white crystalline substance when re-treated with alcohol. Analysis established that the complexes isolated are mixed oxalate-sulfite complexes and their composition can be expressed by the general formula  $Na_{2n}[Th(C_2O_4)_2(SO_3)_n] \cdot x H_2O$ . All the complexes isolated are fine crystalline powders which appear homogeneous when viewed under a microscope. But the refraction indexes of the crystals could not be determined owing to their extremely small size. The investigation is being continued. ASSOCIATION: Institute of Physical Chemistry, Card 1/2, Academy of Sciences USSR.

ESSEN, M. A.

Distr: ME2c

Production of spheroidal inclusions of graphite in cast iron. M. A. Essen. Trudy Gosn. Pechek Inst 1955, No. 6, 101-107, refer. Zhur., Met. Spas. Mater. No. 11111. Gray iron with a ferrite-pearlite base, contg. total C 3.69, graphitic C 3.26, Mn 0.7, Si 1.26, P 0.034, and S 0.074%, was heated for 11 hrs. at 1000°, in the form of disks 20 mm. in diam. and 8 mm. thick, in contact with an Al-Mg alloy, then quenched in water. In the outer 1.5-mm. layer the lamellar graphite inclusions became spheroidal, and the amount of graphite decreased considerably. Inside the sample the graphite lamellae were enlarged. The outside layer contained C 1.47 and Mg 2.08%; the interior of the sample, C 2.70 and Mg 1.59%. The form of graphite inclusions in cast iron can be changed by thermal treatment.

A. N. Pestoff

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SOV/137-59-3-6367

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 3, p 205 (USSR)

AUTHOR: Essen, M. A.

TITLE: Certain Peculiarities of the Diffusion of Carbon in Cast Irons and Steels Containing Mg (Nekotoryye osobennosti diffuzii ugleroda v chugunakh i stalyakh, soderzhashchikh magniy)

PERIODICAL Tr Gruz politekhn. in-t, 1958, Nr 3(60), pp 136-140

ABSTRACT: It was established that the rate of diffusion of C is considerably greater in austenite containing Mg than it is in ordinary austenite. A constant C content of 1.45% observed in peripheral layers of cast irons which had been treated by the Mg-diffusion method tends to lower the solubility of C in austenite under the action of the Mg and, consequently, permits considering the problem of plotting a pseudo-binary Fe-C-Mg diagram which is characterized by a contraction of the gamma region.

A. S.

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S/123/00/000/021/002/00  
A005/A001

Translation from: Referativnyy zhurnal, Mashinostroyeniye, 1960, No. 21, p. 188,  
# 116684

AUTHORS: Tavadze, F. N., Essen, M. A.

TITLE: Recent Experiments for Obtaining Cast Iron With Globular Graphite <sup>18</sup><sub>15</sub>

PERIODICAL: Dokl. Nauchno-proizv. konferentsii mashinostroyiteley i priborostroyiteley. Leningrad, Sudpromgiz, 1959, pp. 180-184

TEXT: Studying the peculiarities of graphite formation in solid metals, the authors carried out experiments for verifying the effect of Mg on gray cast iron with lamellar graphite. It turned out that by diffusion metallization a higher Mg-content in the cast iron can be obtained than by treating the liquid metal with Mg. A protracted contact between Mg and cast iron leads to diffuse transition of carbon from cast iron to magnesium, which attains a conspicuous magnitude. The both diffusive processes in the cast iron cause the conditions leading to the formation of graphite inclusions of globular shape. There are 13 figures.

S. Yu. N.

Translator's note: This is the full translation of the original Russian abstract.

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S/137/51/000/011/085/123  
A060/A101

AUTHORS: Essen M. A., Tabadze, F. N.

TITLE: Influence of pressure upon the formation of spherical graphite

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 11, 1961, 1 - 2, abstract  
1114 ("Sakartvelos politeknuri instituti Shromebi, Tr. Gruz.  
politekhn. in-t", 1959, no. 3 (64), 73 - 75 (Gruz. summary))

TEXT: Cast iron with the following composition was used (in %):  $C_{tot}$  3.0,  
 $C_g$  3.0, Si 4.3, Mn 0.54, P 0.06, S 0.015. The heating temperature was 1,100 +  
20°C, the soaking time at the maximum temperature 5 and 20 hrs, cooling in the  
furnace. The initial structure of the graphite admixtures - flaky and eutectic  
graphite, structure of the metallic base - ferritic. It is presumed that pres-  
sure promotes diffusion penetration of Mg into the cast iron and that the pene-  
tration mechanism is related to the presence of C and Si in the cast iron. The  
addition of Mg into the cast iron produces the conditions for the transformation  
of flakes into spherical inclusions. It is possible that the great surface ten-  
sion plays a role here. The diffusion processes in the cast iron specimen proceed  
under conditions of all-sided uniform compression.

[Abstracter's note: Complete translation]

A. Savel'yeva

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18(7)

SOV/128-59-6-6/25

AUTHOR: Tavadze, F.N., Doctor of Technical Sciences,  
Essen, M.A., Engineer

TITLE: Transformation of Graphite Inclusions in Cast Iron  
During its Saturation with Magnesium

PERIODICAL: Liteynoye Proizvodstvo, 1959, Nr 6, pp 15-18 (USSR)

ABSTRACT: Apart from the interest in a theoretical clarification  
of the question on the formation of spheroidal gra-  
phite, there is no uniform opinion among scientists  
about this problem. During the last 10 years, Soviet  
and foreign literature has published many scientific  
treatments covering this problem. Despite the diffe-  
rent theoretical concepts, all authors agree about the  
methods necessary for the elaboration of this problem  
on liquid cast iron. Exceptions are only the following  
articles published by their author: (Publication of the  
Gruzinskiy Polytechnical Institute, Nr 6, 1955, Nr 7  
1956, Nr 3, 1958) and the article by Stepin, P.J.  
(Liteynoye Proizvodstvo, Nr 11, 1958). These publica-

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SOV/128-59-6-6/25

Transformation of Graphite Inclusions in Cast Iron During its Saturation with Magnesium

tions contain data gained by experiments on the transformation of graphite inclusions in chill type sulphuric cast iron during its saturation with magnesium until the formation of nodular graphite. In this article the methods for separation of graphite in chilled cast iron improved by the authors is described. For these experiments, the authors have put cylindrical samples of uniform weight, but of different types of cast iron with and without magnesium under pressure after heating the samples from 400° up to 1.100° C. The results showed that cast iron can be saturated with magnesium either by pressure or by temperature, but in a different manner than that for molten cast iron. Magnesium in its larger percentage is found on the outside of the shape, less in the inside. The test samples were treated by an additional process to separate the carbon share of the material. A chemical analysis did not show any carbon in the magnesium but an acetylene

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SOV/128-59-6-6/25

Transformation of Graphite Inclusions in Cast Iron During its Saturation with Magnesium

type smell indicated such possibility. The authors maintain that the separation process of carbon plays an important role in the formation of nodular type graphite. The tests with aluminum demonstrated that it bears only a weak influence on the formation of spheroidal graphite. Several microphotos show the various phases of the formation of spheroidal graphite. The experiments made by the authors have not been verified by the experiments of P.J. Stepin despite the fact that he used the same type of methods. The authors assume that Stepin did not make his experiments under sufficient pressure. Likewise his statement that the graphite separation occurs always in spheroidal shape could not be proven. There are 6 photographs, 1 table, 1 diagram and 7 Soviet references

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ESSEN, MA. Cand Tech Sci -- (diss) "Variation in the Form of Graphite  
Inclusions of Pig Iron by Magnesium," Kiev, 1960, 17 pp, 150 copies  
Kiev Polytechnical Institute) (KL, 47/60, 105)

S/137/60/000/011/033/043  
A006/A001

Translation from: Referativnyy zhurnal, Metallurgiya, 1960, No. 11, p. 250,  
# 27240

AUTHORS: Tavadze, F.N., Essen, M.A.

TITLE: New Experiments in the Field of Obtaining Cast Iron With Spheroidal Graphite

PERIODICAL: Dokl. Nauchno-proizv. konferentsii mashinostroiteley i priboro-  
stroiteley, Leningrad, Sudpromgiz, 1959, pp. 180 - 184

TEXT: The method of diffusion metallizing can be used to obtain a higher Mg content in cast iron than by treatment of liquid metal with Mg. At an extended contact with the cast iron a diffusion transition of C from cast iron into Mg takes place; thus conditions are created which entail the formation of graphite inclusions of nodular shape. Impoverishment in C of the surface layer causes the formation of a film around the specimen; the film consists of a



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S/137/60/000/011/033/043  
A006/A001

New Experiments in the Field of Obtaining Cast Iron With Spheroidal Graphite

material which contains from 1.4 to 1.5% C, resembling graphitized steel. A high content of Mg in the peripheral layer proves the possibility of Mg dissolving in graphite and in the metallic base of the cast iron.

A.S.

Translator's note: This is the full translation of the original Russian abstract.

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S/128/61/000/002/006/009  
A054/A133

AUTHORS: Essen, M.A.; Tavadze, F.I.

TITLE: On the solubility of magnesium in iron

PERIODICAL: Liteynoye proizvodstvo, no. 2, 1961, 31 - 34

TEXT: Tests were carried out to study the diffusion of magnesium in iron and to establish the effect of the iron composition on the transformation of nodular graphite. Magnesium was used as a reagent, the test ladles were made of CT. 30 (St. 30) and Y-10A (U-10A) steel, while 9 different kinds of iron were tested containing silicium in the range of 0.72 - 5.25%. It was found that a carbon content of 2.61 - 4.67%, an S-content of 0.015 - 0.225% and a manganese content of 0.29 - 0.7% have no marked effect on the transformation of nodular graphite, whereas the effect of the structure of the metal base and that of the silicon content are considerable. To compare the behavior of the specimens, two of them were each time put in the test ladles in a rising order of their silicium content. The structural analysis of the specimens shows that in specimens with a low silicium content the iron is highly saturated with magnesium. Upon increasing the silicium content from 0.72 to 5.25% the amount of magnesium diffused decreased ✓

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S/128/61/000/002/006/009  
A054/A133

On the solubility of magnesium in iron

from 3 to 1% in the outer layers of the specimen. Moreover, it was found that besides silicium, the concentration of magnesium in the peripheral layers only depends on the carbon content of the iron. The tests (at a temperature of 1,100°C for about 15 h) established the relationship between the change in the shape of graphite inclusions and the magnesium and silicium content of iron. Optimum results with regard to the transformation of graphite inclusions into nodules were obtained for a magnesium content of 1.2 - 1.8% and a silicium content of 2 - 3.8%. Tests carried out at various holding times showed that the time also has an effect on graphite transformation. Tests under high pressure, in order to intensify the diffusion process, produced in 5 hours' holding time a composition of 2.22% C, 1.27% Mg, 3.57% Si with flake-shaped graphite, whereas a holding time of 20 h resulted in a composition of 0.93% C, 1.59% Mg and 2.46% Si with nodular graphite. When the magnesium content of iron is raised above the optimum value, the graphite inclusions do not transform. This must be put down to a deceleration of carbon diffusion, caused by a high magnesium content. Upon increasing the silicium content, the magnesium concentration of the specimen decreases, starting at the peripheral layers and becoming more and more pronounced towards the centre. It may, therefore, be assumed, that the optimum ratio between magnesium and silicium is attained, in the first place, in the core of the specimen, promoting the dif-

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On the solubility of magnesium in iron

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A054/A133

fusion of carbon to such an extent that the carbon atoms can carry out the transformation caused by magnesium. The optimum content of magnesium results in the transformation of graphite inclusions into nodules. Upon increasing the silicium content, three zones are formed in the specimen: an outer layer with excess magnesium content, a second layer with optimum magnesium content and a third layer where the magnesium content is below the optimum. Upon a further increase in the silicium content, only two layers are formed: a peripheral layer with optimum magnesium content with small and medium-size graphite nodules and an inner layer with compact film and nodule graphite. A further increase in silicium content, however, results in the rapid deterioration of the graphite shape. Part of the tests were carried out in the Tula mekhanicheskiy institut im. E.P. Rikman (Tula Mechanical Institute im. E.P. Rikman). There are 9 figures and 9 Soviet-bloc references.

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ESSENSON, A.R.

Operational practices of hatching stations in the Estonian S.S.R.  
Ptitsevodatvo 8 no.8:16-17 Ag '58. (MIRA 11:10)

1. Direktor tresta Inkubatorno-ptitsevodcheskoy stantsii  
Ministerstva sel'skogo khozyaystva Estonskoy SSR.  
(Estonia--Poultry)

ESSEINSON, A. R.

Large inexpensive poultry house. Nauka i pered.op.v sel'khoz.  
9 no.12:19-20 D '59. (MIRA 13:4)

1. Direktor respublikanskogo tresta Inkubatorno-ptitsevodcheskikh  
stantsiy Estonskoy SSSR.  
(Poultry houses and equipment)

ESSENSON, A .R.

A million eggs per year. p506

SOTSIALISTLIK PÖLLUMAJANDUS. Tallinn, Estonia. Vol. 14, no. 11, June 1959

Monthly List of East European Accessions (EEAI), LC. Vol. 8, No. 9, September 1959  
Uncl.

*Essenson, A Ya.*

112-1-1754

Translation from: Referativnyy Zhurnal, Elektrotehnika, 1957, Nr 1,  
p.263 (USSR)

AUTHOR: Essenson, A.Ya.

TITLE: Application of Toroidal Transformers for the Production of  
Radio Meters (Primeneniye toroidal'nykh transformatorov v  
proizvodstve radioizmeritel'nykh priborov')

PERIODICAL: Obmen opytom. M-vo radiotekhn. prom-sti SSSR, 1955,  
Nr 6-7, pp. 3-49

ABSTRACT: The problem concerning advantages and deficiencies of  
toroidal and shell-type transformers is discussed in  
connection with their application in the production of  
radio instruments. Comparative data are presented: of  
voltages induced by external fields, of discontinuities  
of frequency response characteristic, of the weight of  
materials and other data obtained as a result of investi-  
gating output transformers of both types, designed for  
5-w capacity, with a frequency range from 20 to 20,000 cps  
and with an even number of turns. From a data analysis  
it is evident that toroidal transformers have a series of

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112-1-1754

Application of Toroidal Transformers for the Production of Radio  
Meters (Cont.)

advantages as, for ex.: reduction of the noise level for about 30 db, extension of the frequency range about 3 times, reduction of nonlinear and phase distortions, reduction of copper and steel outlay, reduction of dimensions, weight and cost, reduction of losses in copper and steel, and others. Formulas necessary for designing toroidal transformers (power and low-frequency) and chokes are presented, proceeding from the calculation of their lowest cost (in mass production) or of their minimum weight (for compact transportable equipment). The production process of manufacturing toroidal transformers is described as well as the necessary tools and checking-and-measuring equipment for this machine-tool and processing-equipment. A comparison of financial outlays for the production of the shell-type and toroidal transformers is made. The problem of application of toroidal transformers in domestic and foreign technique is presented. Bibliography: 11 titles. Ye.R.S.

Card 2/2

VOYEYKOV, Dmitriy Dmitriyevich; GERTSIGER, Leopold Naumovich;  
KNYAZEV, Konstantin Konstantinovich; LIVSHITS, Il'ya  
Aronovich; ESSENSON, Albert Yakovlevich; POPOV, K.K., red.

[Design of low-frequency generators] Konstruirovaniye nizko-  
chastotnykh generatorov. [By] D.D.Voeikov i dr. Moskva,  
Izd-vo "Energia," 1964. 225 p. (MIRA 17:7)

LIBERMAN, D.L.; ESSI-EZING, A.G., red.; BERGER, E.N., red.

[Medical control of physical education; bibliographic index of Russian literature 1941-1954] Vrachebnyi kontrol' nad fizicheskoi kul'turoi; bibliograficheskii ukazatel' otechestvennoy literatury 1941-1954 gg. Izd.2., ispr. 1 dop. (MIRA 13:9)  
Khar'kov, 1955. 92 p.

1. Kharkov. Gosudarstvennaya nauchno-meditsinskaya biblioteka.  
(Physical education and training--Hygienic aspects)



*ESSI-EZING, A.G.*

AUTHOR: Essi-Ezing, A.G. (Engineer).

133-6-23/33

TITLE: The Conference of Innovators and Inventors of the Tube Manufacturing Industry. (Soveshchaniye ratsionalizatorov i izobretateley trubnoy promyshlennosti).

PERIODICAL: "Stal'" (Steel), 1957, No.6, p.554 (USSR).

ABSTRACT: The Conference took place in Rustavi on 22-23 March, 1957. The proceedings of the Conference are reported in general terms.

AVAILABLE: Library of Congress  
Card 1/1

ESSLOVA, M.

Changes in the infiltrate during the healing of wounds. Part 2.  
Chekh.biol. 2 no.3:178-182 Je '53. (MLRA 7:4)

1. Institut biologii Chekhoslovatskoy Akademii nauk, biologiya  
tkaney, Praga. (Wounds)

**ESSLOVA, Marta**

Transformation of cells in vitro. Cesk. biol. 4 no.3:146-151  
Mar 55.

1. Biologicky ustav CSAV, biologické tkani, Praha.  
(TISSUE CULTURE,  
transform. of cells in)  
(CELLS,  
transform. in vitro)

ESSLOVÁ, M.

EXCERPTA MEDICA Sec.2 Vol.9/10 Physiology, etc. Oct56

4348. ESSLOVÁ M. and LENGEROVÁ A. Biol. Ústav ČSAV, Exp. Biol., Praha.  
\*Vliv složení media použitého během expozice rtg záření na reakci tkáňo-  
vých kultur. Effect of composition of the medium during  
X-ray irradiation on the reaction of tissue cultures  
ČSL. BIOL. 1955, 4/6 (358-361) Graphs 2 Tables 1

Chick fibroblasts were irradiated with  $10^4$  r. During exposure, different experi-  
mental groups were kept in media containing various components of the normal  
medium and controls in Ringer's solution. Cultures in Ringer's solution were af-  
fected irreversibly; in undiluted embryonal extract the changes were reversible,  
i.e. undiluted embryonal extract protects against X-rays. This extract, however,  
inhibits growth of non-irradiated cultures. Lengerová - Prague (II, 1\*)

ESSLOVA, M.

Inhibition of the formation of immune agglutinins in chicks injected  
for immunological adaptation with erythrocytes and leucocytes the  
first day after hatching. P. 9  
Vol. 5, no. 1, Jan. 1956  
CESKOSLOVENSKA BIOLOGIE  
Czechoslovakia

Source: EAST EUROPEAN ACCESSIONS LIST Vol. 5, No. 7, July 1956

ESSLOVA, Me

1941. Influence of ...  
in vitro. ...  
and M. Volfova ...  
Biophysics Inst ...  
of phagocytosis by ...  
"rounded" (spherical) ...  
"long" (cylindrical) ...

ESLOVA, E

"The part played by white blood cells in overcoming the incompatibility of skin homografts in warm-blooded animals."

CESKOSLOVENSKA BIOLOGIE, Praha, Czechoslovakia, Vol. 7, no. 6, Nov. 1958

Monthly list of East Europe Accessions (EEAI), LC, Vol. 8, No. 6, Sept 59  
Unclas

EST, M.

Country : Yugoslavia I  
Category : Human and Animal Physiology, Thermoregulation

Abs. Jour. : Ref Zhur - Biologiya, No. 2, 1959, No. 7869

Author : Atanatskovich, S.; Est, M.  
Instit. : Skopje Medical Faculty  
Title : The Mechanism of Bradycardia in Hypothermia.

Orig Pub. : Godishen zb. Med. fak. Skopje, 1956, 3, 55--66

Abstract : no abstract

1/1



Alloxan administration in the guinea pig with acinous  
tissue rendered atrophic by ligation of the pancreatic duct.  
Nikola Allegretti, Mladen Bat, and Daria Strelakovic  
Ljubljana, Yugoslavia

TITOV, M.; ESTATOVA, Ye.

Organization and personnel of commodity-handling departments of  
petroleum refineries. Neftianik 7 no.2:26 F '62. (MIRA 15:2)

1. TSentral'noye byuro promyshlennykh normativov po trudu.  
(Petroleum—Refining)

TITOV, M.; ESTATOVA, Ye. I.

Norms for the number of workers in the auxiliary units of  
petroleum refinery plants. *Biul.nauch.inform.: trud i zar.plata*  
3 no.5:30-33 '60. (MIRA 13:8)  
(Petroleum--Refining)

ESTATOVA, Ye.T.; PROSIN, P.I.

Revision of wage rates at the Omsk Petroleum Refinery. Neftianik 3  
no.5:28-29 My '58. (MIRA 11:9)

1. Starshiy inzh. Tsentral'nogo byuro normativov truda (for Estato-  
va) 2. Nachal'nik otдела truda i zarplaty Omskogo neftepererabaty-  
vayushchego zavoda (for Prosin).  
(Omsk--Petroleum refineries) (Wages)

ESTATOVA, Ye. T.

SMIRNOVA, O.; ESTATOVA, Ye. T.

New system of wages at a petroleum refinery. Sots.trud. no.4:129-130  
Ap '58. (MIRA 11:4)

(Omsk--Petroleum--Refining) (Wages)

ESTEFANYI, R.

Experiences in construction steel bridges on new railway lines. p.375.  
INZENYER. S. AVEY. (Ministerstvo stavebnictvi) Praha.  
Vol. 4, no. 8, August 1956.

SOURCE: East European Accessions List, (EEAL), Library of Congress  
Vol. 5, no. 12, December 1956.

GAPOCHKO, K.G.; ALIYEV, A.M.; ZELKIND, D.B., kand.med.nauk; STATSENKO,  
A.A.; ESTER, E.; BELEDA, R.V.; AZNAUR'YAN, M.S.

Abstracts. Sov.med. 26 no.7:141-144 J1 '62. (MIRA 15:11)

1. Iz kafedry infeksionnykh bolezney Voenno-meditsinskoy  
ordena Lenina akademii imeni S.M.Korova (dor Gapochko). 2. Iz  
fakul'tetskogo terapevticheskogo otdeleniya Dagestanskoy  
respublikanskoy klinicheskoy bol'nitsy (for Aliyev). 3. Iz  
kozhnogo otdeleniya poliklinikNo. 68, Moskvyy (for Zelkind). 4.  
Iz Dokshukinskoy rayonnoy bol'nitsy Kabardino-Balkarskoy ASSR  
(for Statsenko). 5. Iz Myysakyul'skoy gorodskoy bol'nitsy  
Estonskoy SSR (for Ester).

(MEDICINE---ABSTRACTS)

ESTER, K.M.; KANDROR, V.I.

Method of recording the cardiac minute volume in rabbits by  
means of  $p^{32}$ . Biul. eksp. biol. i med. 60 no.11:118-121 N '65.  
(MIRA 19:1)

1. Otdel patologicheskoy fiziologii (zav. - prof. L.M. Gol'ber)  
Vsesoyuznogo nauchno-issledovatel'skogo instituta eksperimental'noy  
endokrinologii, Moskva. Submitted January 22, 1965.



ESTER, S.

Machines for making cigarette tubes.

P. 272 (PRZEGLAD PAPIERNICZY) (Lodz, Poland) Vol. 13, no. 9. Sept. 1957

SO: Monthly Index of East European Accession (EEAI) LC Vol. 7, No. 5. 1958

*ESTERBERG, L. K.*

USSR / General and Specialized Zoology. Insects. P  
Systematics and Faunistics.

Abs Jour : Ref Zhur - Biol., No 10, 1958, No 44696

Author : Esterberg, L. K.

Inst : Not given

Title : Interesting Species Among the Coleoptera Fauna  
in in Gor'kovskaya and Kirovskaya oblasts

Orig Pub : Entomol. obozreniye, 1957, 36, No. 1, 142-147

Abstract : A list is given of 49 species, representing 14  
families of Coleoptera in the taiga fauna, which  
were typical for these oblasts. The role of  
the rivers in bringing the taiga and Ural va-  
rieties into the southern rayons and to the  
west is indicated.

Gor'kovskoye oblasnoye upravleniye lesnogo khozyaystva, Gor'kiy

Card 1/1

5

ESTERBERG, L.K.

Coleopteran forest pests in Gorkiy Province. Ent. oboz. 38 no.4:  
819-828 '59 (MIRA 13:3)  
(Gorkiy Province--Beetles) (Forest insects)

BATLASHVILI, I.D.; BEY-BIYENKO, G.Ya.; BOGDANOV-KAT'KOV, N.N.; GERASIMOV,  
B.A.; GILYAROV, M.S.; DMITRIYEV, G.V.; ZVEREZOMB-ZUBOVSKIY, Ye.V.;  
ZIMIN, L.S.; KOLOBOVA, A.N.; MEDVEDEV, S.I.; MISHCHENKO, A.I.;  
PETROV, A.I.; RYABOV, M.A.; SAVZDARG, E.E.; SELIVANOVA, S.N.;  
SKORIKOVA, O.A.; TROPKINA, M.F.; SHAPOSENIKOV, G.Kh.; SHCHEGOLEV,  
V.H., prof., doktor sel'skokhoz.nauk; ESTERBERG, L.K.; YAKHONTOV,  
V.V.; REUTSKAYA, O.Ye., red.; CHUNAYEVA, Z.V., tekhn.red.

[Classification of insects on the basis of damage to crops] Opre-  
delitel' nasekomykh po povrezhdeniyam kul'turnykh rastenii. Izd.4.  
perer. i dop. Leningrad, Gos.izd-vo sel'khoz.lit-ry, 1960. 607 p.  
(MIRA 14:1)

(Insects, Injurious and beneficial)

S/123/62/000/014/016/020  
A004/A101

AUTHORS: Hák, Jiří, Šála, Ivan, Esterka, Bohumír, Pokorný, František

TITLE: Activation and cleaning of the surface of alloyed steel prior to nitriding

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 14, 1962, 37, abstract 14B225P (Czechoslovakian patent, class 48d, 5, 18c, 3/25, No. 97555, 15.12.60)

TEXT: A method of cleaning and activating the surface of parts prior to nitriding is patented, which improves the nitriding process and the quality of the layer obtained on chrome-nickel austenitic (or any other alloyed) steel. The method consists of applying to the steel surface to be nitrified a thin hydride layer of any metal (titanium, zirconium, tungsten, chromium, etc.) or a mixture of metal hydrides and ammonium chlorate or carbonate in the form of a suspension in methanol. In heating the surface during the nitriding process, it is cleaned from oxides, activated and the process of atomic nitrogen saturation is facilitated and accelerated. Nitriding is taking place as usual by heating the part in an atmosphere containing atomic nitrogen. After 10 hours nitriding (including the prepara-

Card 1/2

Activation and cleaning of...

S/ 123/62/000/014/016/020  
A004/A101

tion according to the patented method) the surface hardness attains magnitudes of HV 850 - 950.

B. Yakovlev

[Abstracter's note: Complete translation]

Card 2/2

PROCHA, Jiri, Ing., (CZECHIA, Bohemia, -84).

Suggestion of General Theory of the identification and the  
concept of the steel in the steel industry. Steel v. 13 no. 1:15-  
23 Ja 1965.

State Research Institute of Materials and Technology, Prague.

L 3128-66 EWA(d)/EWP(v)/T/EWP(t)/EWP(k)/EWP(h)/EWP(z)/EWP(b)/EWP(l)/ETC(m) JD/VW  
CZ/0031/65/013/001/0019/0023

ACCESSION NR: AP5026869

AUTHOR: Prucha, Jiri (Engineer); Esterka, Bohumir (Engineer)

30  
B

TITLE: Proposed classification of Czechoslovak tool steels and a concept of their general standard

18 19

SOURCE: Strojirenska vyroba, v. 13, no. 1, 1965, 19-23

TOPIC TAGS: tool steel, scientific standard

ABSTRACT: The article proposes a classification of Czechoslovak tool steels according to the end use, based on their quality and the method of their heat treatment. Orig. art. has: 5 tables.

ASSOCIATION: SVUMT, Prague

SUBMITTED: 00

ENCL: 00

SUB CODE: MM, GO

NR REF SOV: 002

OTHER: 012

JPRS

Card 1/1



ESTERKA, Frantisek, dr. inz.; VERFEL, Jaroslav, inz., nositel vyznamenani  
"Za vynikajici praci"

Suspensions from less valuable clays. Geol pruzkum 5 no.9:  
266-270 S '63.

1. Ceskoslovenske haftove doly, n.p., Hodonin, vyzkumny ustav  
Brno; Geologicky pruzkum, n.p., Brno.

ESTERKA, Frantisek, inz. dr.

Prevention of water leakage in mines by stabilized  
betonite. Uhli 6 no. 4: 120-123 Ap '64.

1. Research Institute of the Ceskoslovenske naftove  
doly, Brno.

CA ESTERKA, F.

10

Kinetics of the Grignard reaction in the case of sterically hindered esters. O. Wichterle and F. Esterka. *Collection Czechoslov. Chem. Commun.* 13, 1021-3(1931)(in German). —Triebs (*C.A.* 40, 6396<sup>1</sup>) has found that while the Grignard reaction is instantaneous with most carbonyl compounds, it can be followed in the case of carboxyl esters. Accordingly

the reactivity of various esters with MeMgI has been studied, as an aid to configuration details. To eliminate mutual interference by steric hindrance of the acid and the alkyl radical, Me esters of various acids and acetates of alcohols were investigated. The results in general are in agreement with those of Newman (*C.A.* 45, 4648<sup>2</sup>), who showed that the greater hindrance is found in the esters that have a large number of atoms in position 6 with regard to the carbonyl and a somewhat weaker hindrance in position 5. Exceptions were found in the case of the abnormally great reactivity of iso-BuOAc and the small reactivity of EtOAc. The rule does not hold with alkoxy esters. Alfred Hoffman

ESTERKA, F.

4

✓ The effect of lignosulfonic complex on colloidal and rheological properties of the bentonite-suspensions. F. Esterka and R. Borček (Ústav národního výzkumu, Ústav průmyslu celulózy, Bratislava, Czech.). Chem. zvesti 10, 604-11(1956)(German summary).—A theory of org. dispersing agents in bentonite suspension is developed, and the constitution of the lignin complex from waste sulfite liquor is studied. The stabilization of colloidal and rheological properties of mineral clay of Sarmatian Inner Alpen pan with chlorolignosulfonic acid is described and compared to the dispersing action of tannins.

Jan Miska

AM orb

BRITISH, F.

Brilliant deep wells with mud, p. 148  
(Zblf, Vol. 7, no. 5, May 1947, Praha, Czechoslovakia.)

SO: Monthly List of East European Accessions (SEEL) LC. Vol. 1, no. 12, Dec. 1947. Encl.

ESTERKA, F.

"Effect of ligninsulfonate complex on the colloidal and rheologic properties of a benton suspension."

CHEMICKÉ ZVĚSTI, Praha, Czechoslovakia, Vol. 10, No. 10, December 1959.

Monthly List of East European Accessions (EEA1), LC, Vol. 8, No. 9, September 1959.

Unclassified.

PRZHIKRYL, I. [Prikryl, J.]; ESTERKA, F.

Dispersion of bentonite suspensions by phenol compounds  
considering their chemical configuration. Prace ust naft  
18:57-58 '61.



ESTERKA, F.

Charging of suspensions for boring wells with extra high  
pressure. Prace ust naft 18:58-59 '61.



ESTERKA, F.

Stabilization of boring liquid in presence of mineral salts.  
Prace ust naft 18:59-61 '61.

ESTERKA, F.

Chemical composition of lignins and their effect on the physical  
and chemical properties of bentonites. Prace ust naft 18:61-62  
'61.

YUKHIDOV, Mikhail Yefimovich; MANUYLOV, Leonid Konstantinovich; OSIPOV, Kim Aleksandrovich; KOVALEV, A.M., inzh., ved. red.; ESTERKIN, M.A., inzh., red.; SMIRNOV, B.M., tekhn. red.

[Highly efficient methods of slitting shafts] Vysokoproizvoditel'nye metody obrazovaniya shlitsev na valakh. Moskva, Filial Vses. in-ta nauchn. i tekhn. informatsii, 1958. 17 p. (Peredovoi nauchno-tekhnicheskii i proizvodstvennyi opyt. Tema 10, No.M-58-90/18) (MIRA 16:2)  
(Metal cutting) (Shafting)

ESTERKIN, M.A., inzh.; KOVIKOVA, N.I., inzh., red.

[Mechanisms and equipment for the collection and processing of metal chips] Mekhanizmy i oborudovanie dlia svo-  
ra i pererabotki metallicheskoj struzhki. Moskva, 1963.  
82 p. (Mekhanizatsiia i avtomatizatsiia tekhnologicheskikh  
protseessov; materialy zavodskogo opyta, no.4)

(MIRA 17:9)

1. Moscow. Gosudarstvennyy nauchno-issledovatel'skiy institut  
nauchnoy i tekhnicheskoy informatsii.

KUVSHINSKIY, V.V.; ESTERKIN, M.A., inzh., red.

[Milling] Frezerovanie. Izd.3., perer. Moskva, Izd-vo  
"Mashinostroenie," 1964. 61 p. (MIRA 17:7)

ARTEM'YEV, Vadim Petrovich; SHTEYNER, Igor' Nikolayevich;  
ESTERKIN, M.I., red.

[Gas and mazut burners with steam-mechanical and low-  
pressure sprayers for boilers with low and medium  
evaporative capacity] Gazomutnye gorelki s paromekhaniches-  
skimi i nizkonapornymi forsunkami dlia kotlov maloi i sred-  
nei proizvoditel'nosti. Leningrad, 1964. 22 p.  
(MIRA 17:9)

SOV/119-58-8-6/16

AUTHOR: Esterkin, M. S.

TITLE: Recommended Re-Calibration of Electronic Self-Recording Potentiometers and Bridges (Rekomendatsii po peregraduirovke elektronnykh samopishushchikh potentsiometrov i mostov)

PERIODICAL: Priborostroyeniye, 1958, Nr 8, pp. 18 - 19 (USSR)

ABSTRACT: The scales of the electronic potentiometer ~~ЭЭП~~, -09 and of the bridge ~~ЭМТ~~ are calibrated in accordance with standardized thermocouples and resistance thermometers in various ranges of temperature, as e.g., KhA, KhK, ~~ЭЭП~~; 2-A, 11-A, 12-A, etc. To this calibration there correspond certain electromotive forces of the thermocouple and of the resistance thermometers. The Central Institute of Research dealing with problems of complex automatization found that re-calibration of the device ~~ЭЭП~~-09 for measuring voltage immediately in mV needs only very little work. Exact directives for the changing of resistance in the apparatus are given for two cases. Also for the bridge of the ~~ЭМТ~~, type 2 examples are given, which show that re-calibration of this device is more simple than that of self-recording electronic potentiometers.

Card 1/2

SOV/119-58-8-6/16  
Recommended Re-Calibration of Electronic Self-Recording Potentiometers and  
Bridges

There are 2 figures and 2 tables.

1. Potentiometers--Calibration
2. Electric bridges--Calibration
3. Thermocouples--Applications
4. Electrical equipment--Test results

Card 2/2



ESTERKIN, Mikhail Samoylovich; KOMAROVA, M.V., red.; LARIONOV, G.Ye.,  
tekhn. red.

[Repair radio measurement equipment] Remont radioizmeritel'noi  
apparatury. Moskva, Gos. energ. izd-vo, 1961. 111 p.

(MIRA 14:8)

(Radio measurements—Equipment and supplies)

ESTERKIN, Mikhail Samoylovich; IGNATOVA, M.V., red.

[Faults of radio measuring instruments] Neispravnosti  
radioizmeritel'nykh priborov. Moskva, Energiia, 1964.  
239 p. (MIRA 17:10)

ESTERKIN, R.I.; TSYPM, V.M.

Eliminating vibrational conduction in a cast-iron boiler  
boiler converted to gaseous fuel. G. G. [unclear] 1964.  
(1964 10:8)

ESTERKIN, B.I., inzh.

Three-chamber furnace for small capacity boilers. Energetik  
8 no.1:12-14 Ja '60. (MIRA 13:5)  
(Furnaces)

ESTERKIN, Rakhmiyel' Iosifovich; SHATSILLO, O.I., inzh., red.; FREGER,  
D.P., red. izd-va; GVIRTS, V.L., tekhn. red.

[Experience in adjusting boiler units operating on gas fuel] Opyt  
naladki kotloagregatov na gazoobraznom toplive. Leningrad, 1961.  
22 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Otmen  
peredovym opytom. Seria: Energetika, no.2)  
(Boilers)

STOLPNER, Yefim Borisovich; ~~NESTEKIN~~, Rakhmiyel' Iosifovich; BARSHEVYK,  
I.K., nauchnyy red.; RUSAKOVA, L.Ya., vedushchiy red.;  
YASHCHURZHINSKAYA, A.B., tekhn.red.

[Adjustment and operation of gas supply systems for boiler  
units] Naladka i ekspluatatsiya sistem gazosnabzhenia kotel'-  
nykh ustanovok. Leningrad, Gos.nauchno-tekhn.isd-vo neft. i  
gorno-toplivnoi lit-ry, 1961. 353 p.

(MIRA 14:12)

(Boilers--Firing)

(Gas as fuel)

ESTERKIN, R. I.

Ways to economize on electric energy in boilers operating on gas.  
Gas. prom. 7 no. 5:21-25 '62. (MIRA 17:11)

ISSERLIN, Aleksandr Semenovich; ESTERKIN, I.I., nauchn. red.;  
DESHALYT, M.G., ved. red.; YASHCHURZHINSKAYA, A.B.,  
tekhn. red.

[Gas burners] Gazovye gorelki. Leningrad, Gostoptekhzdat,  
1963. 121 p. (MIRA 16:12)  
(Gas burners)



ESTERKIN, Rakhmiyel' Iosifovich; BARSHTEYN, I.K., nauchn. red.;  
DESHALYT, M.G., ved. red.; YASHCHURZHINSKAYA, A.B.,  
tekhn. red.

[Operation of boiler plants with gas as fuel] Eksploatatsiia  
kotlogregatov na gazoobraznom toplive. Leningrad, Gostop-  
tekhizdat, 1963. 156 p. (MIRA 17:1)  
(Boilers—Fuel systems)

ЕСТЕРКИН, Р.И., инж. (Ленинград); ТЮНИН, В.М., инж. (Ленинград)

Converting heating boilers to gas fuel. Vol. 1 eng. tech.  
no.12:3-8 D (64) (MIRA 1964)

STOLNER, Yefim Borisovich; ESTERKIN, Rakhmiyel' Iosifovich;  
ISSERLIN, A.S., nauchn. red.; RUSAKOVA, I.Ya., ved. red.

[Adjustment and operation of the gas supply systems of  
boilers] Naladka i ekspluatatsiia sistem gazosnabzheniia  
kotel'nykh ustanovok. Izd.2., perer. i dop. Leningrad,  
Izd-vo "Nedra," 1964. 359 p. (MIKA 17:7)

ESTERKIN, R.I.

Characteristics of the burning out of gas in slotted  
gas burners. Gaz. prom. 10 no.9:26-30 '65.

(MIRA 18:11)

ISSERLIN, A.S., kand. tekhn. nauk; ESTERKIN, R.I., inzh.; TSYPIN, V.M., inzh.

Choice of single-nozzle ejection-type gas burners with complete  
mixing. Energomashinostroenie 11 no.5:42-43 My '65. (MIRA 18:6)

ESTERKIN, Ye.S., kandidat meditsinskikh nauk

Observations on the use of magnesium salts in labor. Sov.med.  
19 no.9:72-74 S '55. (MLRA 8:12)

1. Iz akushersko-ginekologicheskoy kliniki (zav.-prof. I.I.  
Yakovlev) i Leningradskogo meditsinskogo instituta imeni  
akad. I.P.Pavlova (dir. A.I.Ivanov)

(MAGNESIUM

magnesium salt, eff. on labor)

(LABOR,

eff. of magnesium salt on course)

ESTERKIN, Ye. S., kandidat meditsinskikh nauk

Anomalies of uterine muscular contractions in hypertensive states  
of various etiology. Akush. i gin. 33 no.1:41-43 Ja-F '57  
(MLRA 10:4)

1. Iz kafedry akusherstva i ginekologii (zav.-prof. I.I. Yakevlev)  
i Leningradskogo meditsinskogo instituta imeni akad. I.P. Pavlova.

(LABOR, compl.

anomalies of uterine & musc. contractions in  
hypertension) (Rus)

(HYPERTENSION, in pregn.

causing anomalies of uterine & musc. contractions  
in labor) (Rus)

ESTERKIN, Ye.S., Land. med. nauk

Intrauterine death of the fetus in pregnant women with hypertension.  
Akush. i gin. no. 30-32 N-D '63. (MIRA 17:12)

1. Iz kafedry akusherstva i ginekologii (zav. - zasluž. deyatel' nauki, prof. I.I.Yakovlev) i Leningradskogo meditsinskogo instituta imeni I.P.Pavlova.



GOREV, K.V.; ESTERKINA, V.A.

Effect of heat treatment and composition on the hardness and red  
hardness of R-9 cast high-speed steel. Sbor.nauch.trud. Fiz.-tekhn.  
inst. AN BSSR no.2:133-149 '55. (MLRA 10:1)

(Tool steel--Testing)



S/123/60/000/024/006/014  
A005/A001

Translation from: Referativnyy zhurnal, Mashinostroyeniye, 1960, No. 24, p. 128,  
# 132945

AUTHORS: Gorev, K.V., Esterkina, V.A., Yanchenko, M.M., Pavel'yeva, T.S.

TITLE: The Cementation-Temperature Effect on the Mechanical Properties and  
Structure of Steels 18XГТ (18KhGT), 12XH3A (12KhNZA), and 20X (20Kh)

PERIODICAL: Sb. nauchn. tr. Fiz-tekhn. in-t AN BSSR, 1959, No. 5, pp. 133-146

TEXT: For determining the optimum conditions of high-temperature cementation, the temperature effect was studied (at 920, 960, 1,000°C) of gas cementation on the structure and the mechanical properties of steels 18KhGT, 12KhNZA, and 20Kh. Kerosene, synthol, and spindle oil were used as carbonizers. The cementation at temperatures of about 1,000°C does not deteriorate the mechanical steel properties. There are 7 figures and 3 references.

I.N.N.

Translator's note: This is the full translation of the original Russian abstract.

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