

NIKOL'SKIY, K.K.

Protection against corrosion of underground metal structures in  
France. Zashch.met. 1 no.1:133-134 Ja-F '65.

(MIRA 18:5)

NIKOL'SKIY, Konstantin Konstantinovich; FROLOV, Pavel Alekseyevich;  
BATRAKOVA, T.A., red.

[Use of polymeric materials in the equipment of communication systems] Primenenie polimernykh materialov v tekhnike dal'nei svyazi. Moskva, Svyaz', 1965. 107 p.  
(MIRA 18:12)

L 01588-01 EWE(d)/PIS-2/DAT(E)/PA(v)/HW(S)/T 101(-) W/RM  
ACC NR: AK6023689 Monograph UR 55 B41

Nikol'skiy, Konstantin Konstantinovich; Frolov, Pavel Alekseyevich

Use of polymeric materials in long distance communication (Primeneniye polimernykh materialov v tekhnike dal'ney svyazi) Moscow, Izd-vo "Svyaz", 65. 0109 p. illus., biblio. (At head of title: Ministerstvo svyazi Soyuzo SSR. Tekhnicheskoye upravleniye) 12,000 copies printed. Series note: Lektsii po tekhnike svyazi

TOPIC TAGS: polymer chemical, communication equipment, communication industry, communications wire, polymer chemistry, plastic

PURPOSE AND COVERAGE: Application of polymer materials (plastics and others) to long distance communication technology is presented in a considerable detail. Starting with a general explanation of polymer chemistry, the authors proceed to the properties and characteristics of polymer materials used in communications. They then continue by describing the individual polymer materials and their uses and point the direction for future research and development. The book is intended for engineers and technicians working in the design, construction, and utilization of the communications enterprises.

TABLE OF CONTENTS:

- Foreword - - 3
- Introduction - - 4
- Ch. 1. Basic concepts pertaining to polymer materials

Card 1/3

UDC: 678.06:621.395.4

L 01994-67

ACC NR: AM6023689

5

Ch. 2. Properties of main polymer materials used in long distance communication technology

- 2.1. General information - - 13
- 2.2. Polyethylene - - 16
- 2.3. Polypropylene - - 22
- 2.4. Polyisobutylene - - 24
- 2.5. Polyvinyl chloride - - 25
- 2.6. Polystyrene and styroflex - - 28
- 2.7. Fluoroplastics<sup>12</sup> - 29
- 2.8. Vinyl plastic - - 33
- 2.9. Fiber-glass reinforced plastics - - 35
- 2.10. Foamed plastics - - 36
- 2.11. Electrotechnical sheet laminate (resin-saturated paper) - - 38
- 2.12. Kipor-N<sup>12</sup> - 39
- 2.13. Capron<sup>12</sup> - 40
- 2.14. Organic glasses - - 41
- 2.15. Pressed powders and pressed materials - - 42
- 2.16. Epoxy resins - - 44
- 2.17. Epoxy compounds - - 45
- 2.18. Polyester resin PH-1<sup>12</sup> - 49
- 2.19. Synthetic glue - - 50
- 2.20. Bitumen - - 56

Card 2/3

NIKOL'SKIY, K.N.

AUTHOR: Nikol'skiy, K. N.,

50-12-4/19

TITLE: On the Peculiarities of the Winter Temperature Conditions of the Tuva Autonomous Oblast (Osobennosti zimnego temperaturnogo rezhima Tuvinskoj avtonomnoj oblasti)

PERIODICAL: Meteorologiyai Gidrologiya, 1957, Nr 12, pp. 22-27 (USSR)

ABSTRACT: The orographic influences are of great importance for the development of synoptic processes and for the character of the weather in the Tuvin district. In this district in winter the predominating of the little cloudy weather with light winds is observed as result of the frequent formation of the areas of high pressure. This fact, as well as the low temperature cause a high density and steadyness of this air layer. The natural protection by the mountain chains contributes to the stability of this air layer, therefore it is wheather destroyed under the influence of the turbulent air mixture in the adjoining ground layer of the air, nor according to the passage of fronts through this area. As from the tables 1 and 2 is to be seen, no winds ( $> 10$  m/sec) are observed in Kyzyl' in winter. Here, an absolute calm is governing. Theanalysis of the cloud formation shows that in winter here no cloudiness is observed below 600 m. The lacking of the thawing weather during the winter and of the heavy fluctuations in tempe-

Card 1/ 3

On the Peculiarities of the Winter Temperature Conditions of the 50-12-4/19  
Tuva Autonomous Oblast.

ture points to that here really does not take place an interchange of the air masses (in any case not in the adjoining ground layer in a certain height) and a "stationary air mass" fills up the mountain-fault. As from table 3 is to be seen, in this district in winter an essential temperature inversion is observed, which, beginning on the ground surface, is preserved during the whole period, in the course of 3 winter months. The complete destruction of the winter inversion takes place in the first days of April, because the increasing heating of ground and air by the solar radiation predominates the night refrigeration. The analysis of the aerological and synoptic data shows that the height of the upper inversion boundary decreases in the presence of the passage of cold air masses over the country of the Tuva autonomous district and of the following infiltration of cold arctic or continental (Siberian) air masses. The informations about the height of the upper inversion boundary and the conditions of its alteration are of great practical importance, e.g. for the air traffic. The presence of a considerable air layer (1,5-2 km) in the Tuva mountain-fault, which has generally a low temperature, compared to the surrounding domains, appears in the values of the

Card 2/3

On the Peculiarities of the Winter Temperature Conditions of the Tuva Autonomous Oblast. 50-12-4/19

of the average temperature of the lower 5-km air layer above the domain concerned. There are 3 figures, 3 tables, and 2 Slavic references.

AVAILABLE: Library of Congress

1. Meteorology
2. Temperature
3. Density

Card 3/3

**AUTORS:** Filimonov, V. P., Nikol'skiy, K. N. 50-58-4-14/26

**TITLE:** On the Scale of Fire Susceptibility and the Forecast of Fire Danger in Forests (O shkale gorimosti i prognozakh pozharoopasnosti v lesu)

**PERIODICAL:** Meteorologiya i Gidrologiya, 1958, Nr 4. pp 38-39 (USSR)

**ABSTRACT:** For the determination of the probability of the rising of forest fires is used, as is known, such a scale. It is based upon a complex index of the susceptibility for fire, which was worked out by professor Nesterov. This index is a product of the air temperature at 1300 hours multiplied by the saturation deficit. The sum of such indices for a number of days, at which no rain has brought more than 3 mm precipitation, characterize the degree of fire susceptibility, which according to the value of this sum belongs to one of the fire susceptibility classes. The computation of this coefficient together with the specialized fire susceptibility forecast is a big step forward in the forest fire prevention, though this method also has some deficiencies. Above all there is no good correlation between the repetition frequency of the forest fires and the corresponding fire susceptibility

Card 1/3



On the Scale of Fire Susceptibility and the Forecast of Fire 50-58-4-14/26  
Danger in Forests

classes, which are determined by means of the mentioned method. Season particularities of the rising of fires are not considered, especially not in spring, when they arise at a low value of the fire susceptibility index. The wind velocity, which plays a role in the fire expansion, is not considered. The fixed criterion of the removal of the fire danger - the precipitation quantity of 3 mm, is not brought into connection with a precedent period of aridity. Besides precipitation quantities above 3 mm are not considered. B. L. Dandre (ref. 1) suggests a fire susceptibility scale and fire danger classes of a somewhat different types. Instead of the product here the sum of the air temperature and the saturation deficit is used. The class-scale here is based upon the season principle. Separated for spring and summer. Thereby the forest fire danger is to increase with a considerably lower fire susceptibility index. A special coefficient is introduced, by which the fallen precipitations (in mm) are multiplied. Also a so called negative fire susceptibility was introduced, which characterizes the moisture degree of the litter of leaves. A scale of the extinguishing of the negative fire susceptibility is worked

Card 2/3

On the Scale of Fire Susceptibility and the Forecast of Fire 50-50-4-14/26  
Danger in Forests

out. It indicates the day on which, after the rising of the negative susceptibility, a fire can rise. Corrections for the wind velocity are introduced. Therefore the scale by Dandre comes much closer to the conditions, which really prevail in forests. By several examples of application in the woods of the Tuvinskiy autonomous district the author could convince himself of the advantages of the method by Dandre. There are 1 table and 1 reference, which is Soviet.

AVAILABLE: Library of Congress

1. Forest fires - Statistical analysis

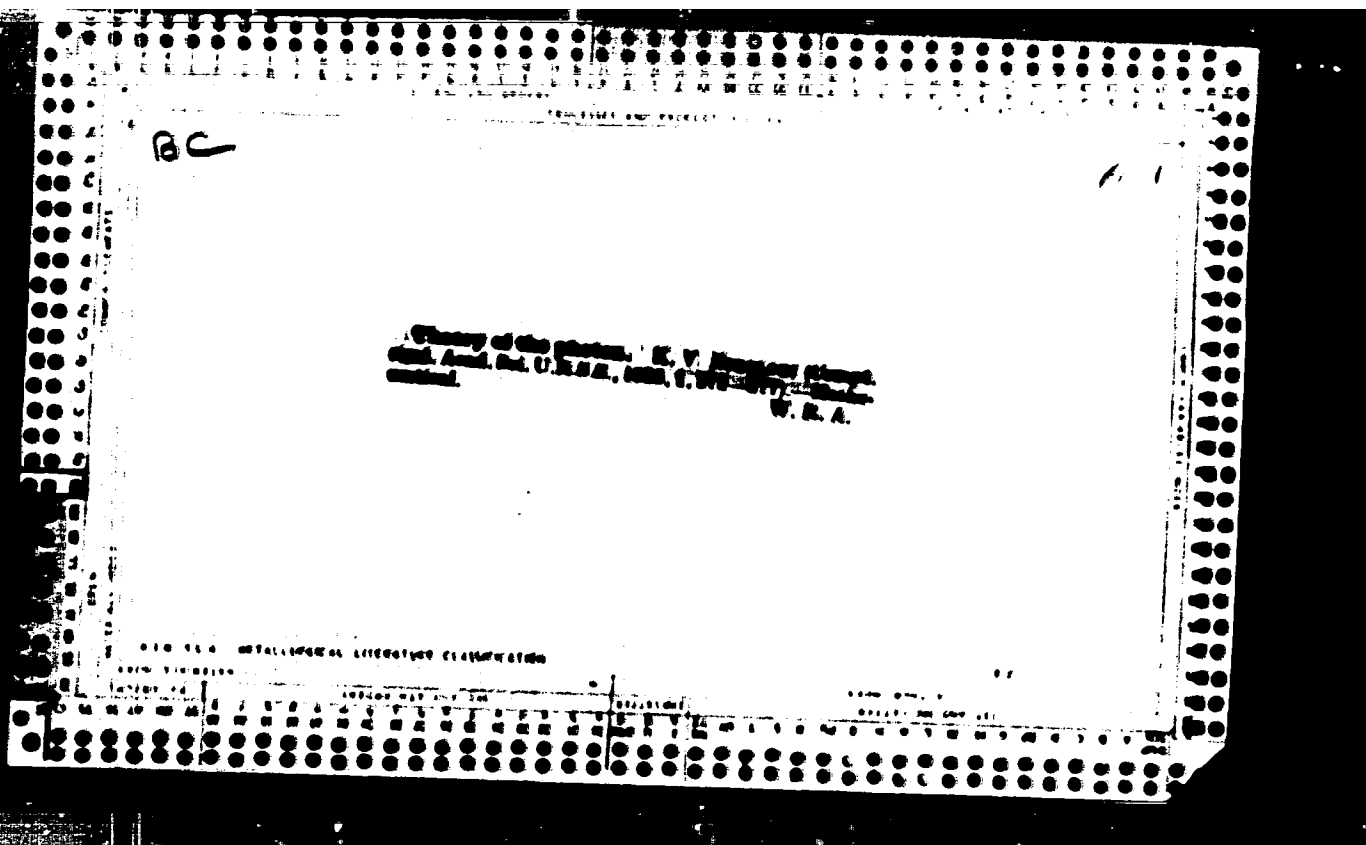
Card 3/3

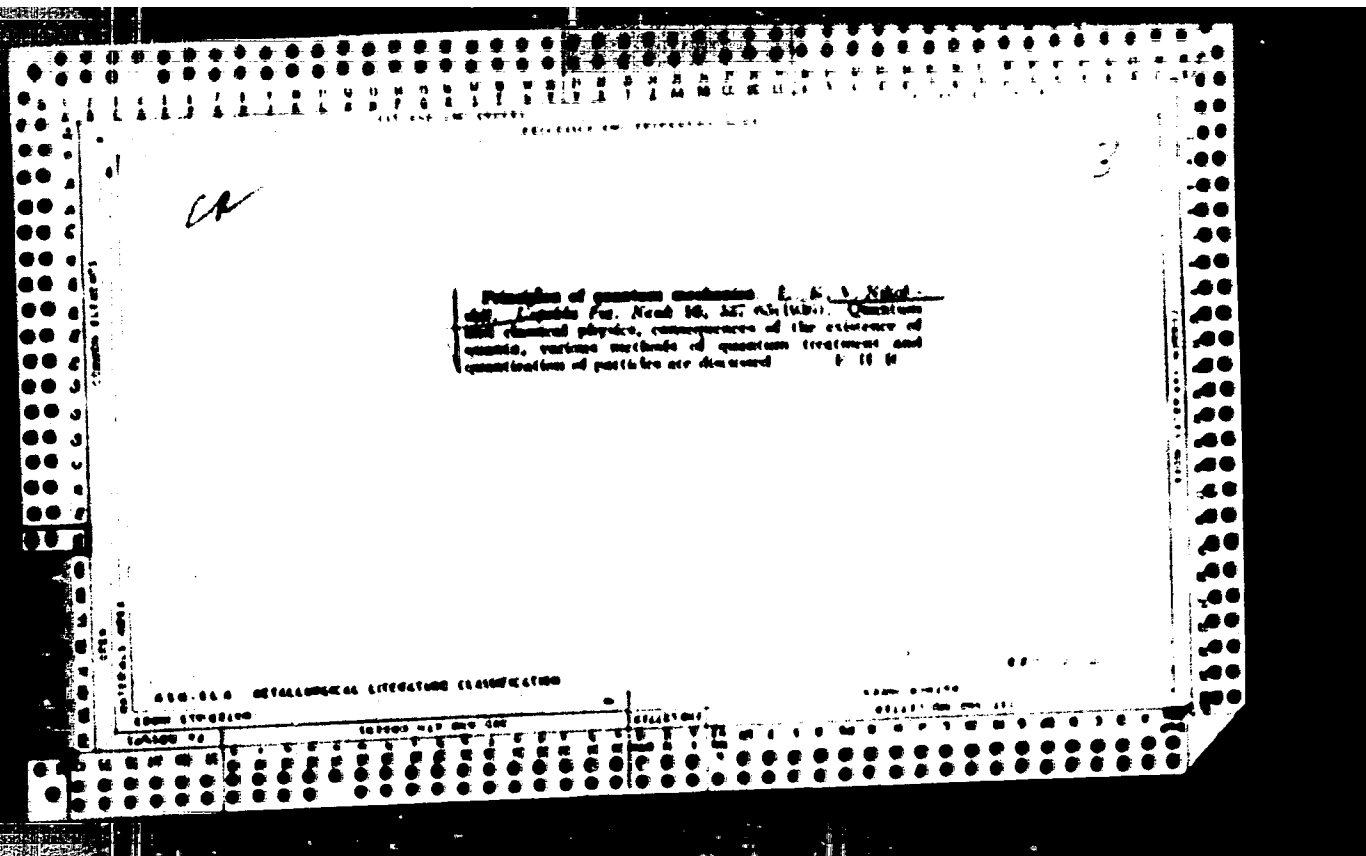
NIKOL'SKIY, K.K.

Formation of secondary cyclones over the southern regions of  
Krasnoyarsk Territory. Trudy GGO no.66:125-132 '60.  
(MIRA 13:6)  
(Krasnoyarsk Territory--Cyclones)

AFANAS'YEVA, N.A.; VARYAKOV, E.B.; NIKOL'SKIY, Kh.Sh.; MEL'NIKOV,  
D.Ye., doktor 1st. nauk, red.; BACHININ, G.I., red.;  
CHATSKAYA, M.G., tekhn. red.

[Ruhr Valley as the economic basis of West-German militarism]  
Rur - ekonomicheskaya baza zapadnogermanskogo militarizma.  
(MIRA 17:2)





The problem of mass of an elementary particle ...  
in the relativistic Dirac equation for the electron there is actually contained the possibility of interpreting the electron's mass as resulting from the reaction of its quantum mechanical field upon itself rather than being of electromagnetic origin  
H. C. Thomas

Physics Inst. in. P. N. Lebedev, Dept. Physico-Math. Sci., AS.

NIKOL'SKIY, K. V.

Quantum processes. Moskva, Gos. izd. tekhn.-teoret. lit-ry, 1940. 342 p.



NIKOL'SKIY, K. V.

"Relativistic Formulation of Quantum Interaction," Zhur. Eksper. i Teoret. Fiz.,  
13, Nos. 7-8, 1943.

Physios Inst. im. P. N. Lebedev, Dept. Physico-Math. Sci., AS.

NIKOL'SKIY, K. V.

"On the Theory of Mesons," Dok. AN, 38, Nos. 5-6, 1943.

Physics Inst. in P. N. Lebedev, Dept. Physico-Math. Sci., AS.

NIKOL'SKIY, K. V.

"On a New Theory of Electromagnetic Field," Dok. AN, 40, No. 8, 1943.

Physics Inst. im. P. N. Lebedev, Dept. Physico-Math. Sci., AS.

NIKOLSKI, K. V.

HEB/Analysis Digest - Quantum Theory  
Elementary particles - Interaction 1965

Formulation of the Heisenberg-Pauli Indeterminacy  
Principle for the Quantum Problem of Interaction  
Between Elementary Particles," K. V. Nikol'skiy, 4 pp

PA 4762  
"GR Acad Sci" Vol XIII, No 1

An application of the quantum concept of the 'dy-  
namic variable' to the classical theory of the number  
of elementary particles, to widen the range of phe-  
nomena which can be investigated mechanically, thus  
implying the existence of systems in such states in  
which the number of particles is, in the sense of  
the quantum theory, an indeterminate quantity.

HEB/Analysis Digest - Quantum Theory (contd) 1965  
Elementary particles - Interaction

The article is a generalization of the methods of  
quantum mechanics, called "secondary quantization,"  
to deal with those indeterminate quantities.

NIKOL'SKIY, K. V.

IA 165796

USSR/Physics - Quantum Mechanics

1 May 50

"Concerning Infinite Matrices That Are Used in the Theory of Secondary Quantization," K. V. Nikol'skiy, Phys Inst imeni Lebedev, Acad Sci USSR

"Dok Ak Nauk SSSR" Vol LXXII, No 1, pp 39-40

Discusses certain possible determinations of unnatural mathematical entities which can be useful in formulation of quantum-mechanical laws. Thus, if  $A$  is a matrix of range 5 with a certain "diagonal" with numbers  $a, b, c, d$ , and one, then  $A^5$  becomes  $abcd \cdot E$ , where  $E$  is a unit matrix. This is then generalized for an infinite matrix. Submitted 6 Mar 50 by Acad S. I. Vavilov.

165796

NIKOLSKIY, K.V.

Nikolskiy, K. V. Killing's equation and the fundamental Killing tensor. Doklady Akad. Nauk SSSR (N.S.) 72, 371-379 (1950). (Russian)

The author raises the question of whether a field theory could be based on a third order tensor  $\lambda_{ijk}$  in terms of which the ordinary metric could be defined as  $g_{ij} = \lambda_{ijk} \lambda_{ijl}$ . He obtains equations satisfied by  $\lambda_{ijk}$  which are analogous to those of Killing for  $g_{ij}$ .  
A. J. Coleman

Source: Mathematical Reviews, Vol. 11, No. 9

L 578Lh-65 EWT(d) LP(c)

ACCESSION NO: AP5013688

UR/0042/6A/019/003/0123/0128

AUTHOR: Nikol'skiy, K.V.

8  
B

TITLE: Newton binomials and an equation of Abel

SOURCE: Uspekhi matematicheskikh nauk, v. 19, no. 5, 1964, 123-128

TOPIC NAME: mathematic matrix, algebra

Abstract: The aim of this article is to show that simple formulas in elementary algebra can be expressed in a new form containing noncommutative quantities. Using the matrices

$$\begin{pmatrix} 0 & 1 & 0 & \dots & 0 \\ 0 & 0 & 1 & \dots & 0 \\ \dots & \dots & \dots & \dots & \dots \\ 0 & 0 & 0 & \dots & 1 \\ 0 & 0 & 0 & \dots & 0 \end{pmatrix} \quad \text{and} \quad \begin{pmatrix} 0 & 1 & 0 & \dots & 0 \\ 0 & 0 & 1 & \dots & 0 \\ \dots & \dots & \dots & \dots & \dots \\ 0 & 0 & 0 & \dots & 1 \\ 0 & 0 & 0 & \dots & 0 \end{pmatrix}$$

the author expresses the

Newton binomial  $(a+b)^n = a^n + a^{n-1}b + \binom{n}{2} a^{n-2}b^2 + \dots + \binom{n-1}{1} a^{n-1}b + b^n$

in the form  $(1+1)^n = 2^n = (S_{n-1} + D_{n-1})^{n-1}$ , or

in general,  $(a+b)^n = (S_{n-1} + a+b-1 D_{n-1})^{n-1}$

L 578113-65

ACCESSION NR: AP5018638

It is noted that all properties of binomial coefficients and their equivalent statistical properties can be expressed in terms of the relationships between noncommutative entities constructed by means of the matrices D and N. Further results include an expression of the gamma function in the form

$$\Gamma(a) = \sum_{n=0}^{\infty} \frac{1}{n!} (S_{n+1} + \frac{a}{n} D_{n+1})^{-1}$$

and an hypergeometric series

$$\times \Delta x \lim_{x \rightarrow \infty} \left[ S_{x+1} - \left( \frac{1}{x} (S_{x+1} + \frac{a}{x} D_{x+1}) \right)^{x+1} \right]^{-1}$$

in the form

$$\Phi(a, b, c; x) = 1 - \sum_{n=0}^{\infty} \frac{1}{n!} \frac{(a)_n (b)_n}{(c)_n} \left( \frac{x}{1+x} \right)^n$$

These provide matrix analogs of the following transcendental relationships that are commonly used in mathematical physics:

$$\Gamma(x) = \lim_{n \rightarrow \infty} \frac{n!}{n^x} \Gamma\left(x, \frac{1}{n}\right)$$

$$\Gamma(x) \Gamma(y) = \Gamma(x+y) \Gamma\left(\frac{x}{y}\right)$$

Regarding the equation

$$\Gamma(x) \Gamma(y) = \Gamma(x+y) \Gamma\left(\frac{x}{y}\right) \quad (1)$$



REF ID: A65018635

... transformed it into an equation that, as he proved, is related to the well-known expression for a finite difference  $(1 - \beta \Delta)^n (z^n)$  with constant difference  $\beta$ . Matrices of rank  $n$ ,

$$S_n = \begin{pmatrix} 0 & 1 & 0 & \dots & 0 \\ 0 & 0 & 1 & \dots & 0 \\ \vdots & \vdots & \vdots & \ddots & \vdots \\ 0 & 0 & 0 & \dots & 1 \\ 1 & 0 & 0 & \dots & 0 \end{pmatrix}, \quad D_n = \begin{pmatrix} 1 & 0 & 0 & \dots & 0 \\ 0 & 1 & 0 & \dots & 0 \\ \vdots & \vdots & \vdots & \ddots & \vdots \\ 0 & 0 & 0 & \dots & 1 \\ 0 & 0 & 0 & \dots & 0 \end{pmatrix}$$

can be used to express equation (1) in the form

$$(S_n - D_n)^n = \sum_{\mu=0}^n \binom{n}{\mu} (z S_n - \beta D_n)^\mu,$$

where  $n$  is a positive integer,  $x$  and  $\beta$  are arbitrary numbers, and  $\binom{n}{\mu}$  are binomial coefficients which, as has been seen, can be expressed in matrix form. It is noted that the relationship between (ii) and the theory of finite differences can also be formulated in the following general form: i.e., the equation for a generalized power,

$$(a + b)^n = \sum_{a=0}^n \binom{n}{a} a^k b^{n-a}, \quad \text{which}$$

Card 1/4

REF ID: A69018688

can be expressed in the form

$$((n+b)S_n - AR_n)^{-1} z_n = \sum_{i=1}^n (aS_{n-i} - bR_{n-i})^{-1} \begin{pmatrix} a \\ b \end{pmatrix} (bS_n - aR_n)^{-1} z_n$$

where  $I_{\alpha}$  is the identity matrix of rank  $\alpha$ .

$$S_n = \begin{pmatrix} 0 & 1 & 0 & \dots & 0 \\ 0 & 0 & 1 & \dots & 0 \\ 0 & 0 & 0 & \dots & 1 \\ \vdots & \vdots & \vdots & \ddots & \vdots \\ 1 & 0 & 0 & \dots & 0 \end{pmatrix}, \quad R_n = \begin{pmatrix} 0 & 1 & 0 & \dots & 0 \\ 0 & 0 & 2 & \dots & 0 \\ \vdots & \vdots & \vdots & \ddots & \vdots \\ 0 & 0 & 0 & \dots & 1 \end{pmatrix}$$

is a block of rank  $\alpha$  and  $S_n - I_{\alpha} = S_{n-\alpha}$  and  $R_n - I_{\alpha} = R_{n-\alpha}$  are matrices of rank  $\alpha$  and  $(n-\alpha)$  respectively.

CLASSIFICATION: none

CONTROL NO: 1478-02

DATE: 1974-07-11

CONTROL NO:

DATE:

CONTROL NO:

DATE:

TABLE I EXON REFINITION 307/3191

Sovetskoye po obrabotke shirokoprochnykh splyavov, Moscow, 1977.  
Corrosion-Resistant Alloys: (Abstracts of...). (Trans-  
lation of Heat-Resistant Alloys) Collection of Papers Read at  
the Conference, Moscow, 25-26. 48 ISSN, 1980. 231 p. 3,500  
copies printed.

Engineering Agencies: Ministry of SMM. Smolensk metalworking  
plants to conduct metallurgical research work under  
particular metallurgical S. A. A. Bujaro. Ministry report to problems  
of metallurgical plants.

Eng. M. I. V. Kuznetsov. Academician; M. of Publishing House:  
V. A. Serey, (Tech. Sci. V. T. Brugal).

Program: This book is intended for metallurgists.

Comments: The book consists of thirty papers read at the Conference  
on the Treatment of Heat-Resistant Alloys held in Moscow by the  
Committee on Machine-Building Technology, Institute of the  
Academy of Sciences, Academy of Sciences, USSR, in 1977. The  
papers deal with four principal groups of alloys: steel alloys  
with refractory metal, titanium alloys, nickel alloys (together  
with cobalt), and aluminum alloys. The alloys (together  
with their properties) in connection with their application  
in the manufacturing of turbine blades, heat engines, boilers,  
reactors, containers for high-temperature media, dies, casting  
molds, and metal-casting tools. So permeability are mentioned.  
Some of the articles are accompanied by references, mainly  
Soviet.

Author: P. V. Gost Mater House for Gas Turbines  
Moscow, B. I., I. O. Shchegolev, B. A. Permya, and V. I. Babitsky,  
Aerospace Mechanical Conditions in the Processing of Aluminum  
Alloys of Titanium and Chromium Steels

Author: I. B. and A. I. Aleksandrov. Effect of Work Hardening  
on the Fatigue Strength of Heat-Resistant Steels at High Tempera-  
tures 41

Author: V. A. Deep Drawing of Products from Heat-Resistant Steels  
with the Application of Deep Pressing 33

Author: I. B. and V. B. Sokolova. Plastic Workability and  
Mechanical Properties of Titanium Alloys as Determined by the  
Conditions of Hot Working 29

Author: N. P. Special Features of the Flamping of Heat-Resistant  
and Titanium-Alloy Steels 67

Author: I. A. Spectral Properties of Heat-Resistant Steel Standard Parts  
(Author's Abstracts: Steels, Metals, etc.) 73

Author: A. Ya. Precision Deep Forging of Steel (Abstracts)  
87

Author: I. A. Special Features of the Deep Forging of Tita-  
nium Alloys 98

Author: S. A. Welding of Turbine Parts Made of Heat-Resistant  
Alloys 109

Author: B. I. Automatic Electric-Arc and Electroslag Welding of  
Heat-Resistant Alloys 113

NIEOL'SKIY, Leonid Aleksandrovich; SKUGAREV, I.G., kand.tekhn. nauk,  
retsenzent; SHUMSKAYA, L.G., red.izd-va; ORESHKINA, V.I.,  
tekhn. red.

[Forging titanium alloy blanks] Goriachaya shtampovka zago-  
tovok iz titanovykh splavov. Moskva, Mashinostroenie, 1964.  
227 p. (MIRA 17:3)

AM1036543

## BOOK EXPLOITATION

8/

**Nikol'skiy, Leonid Aleksandrovich**

Drop forging of products made of titanium alloys (Goryachaya shtampovka zagotovok iz titanovykh splavov), Moscow, "Mashinostroyeniye", 1964, 227 p. illus., biblic. Errata slip inserted. 3,000 copies printed.

TOPIC TAGS: drop forging, titanium alloy, heat treatment

PURPOSE AND COVERAGE: The book deals with the basic problems of the technology of producing drop forged blanks from titanium alloys. The thermal-mechanical regimes of forging, structural elements and accuracy of the blanks, equipment selection, calculation of tolerances, determination of forces for forging, scale removal, etc. are considered. The book is intended for engineers and technicians in plants and design bureaus. It will also be useful to teachers, students in higher educational institutions and graduate students specializing in drop forging of metals.

## TABLE OF CONTENTS [abridged]:

Introduction -- 3

Ch. I. Brief information on titanium -- 5

Card 1/2

AM4036543

Ch. II. General technological properties -- 20  
Ch. III. Thermochemical parameters of pressure working in the hot state -- 37  
Ch. IV. Design elements of forged billets -- 98  
Ch. V. Tolerances -- 118  
Ch. VI. Forging and drop forging -- 137  
Ch. VII. Heat treatment of blanks from titanium alloys -- 197  
Ch. VIII. Initial billet -- 200  
Ch. IX. Certain features of the design, machining, and use of dies -- 206  
Ch. X. Scale removal from forged billets -- 218  
Ch. XI. Safety measures -- 222  
Bibliography -- 225

SUB CODE: M4

SUBMITTED: 14Dec63

NR REF SOV: 034

OTHER: 023

DATE ACQ: 16Apr64

Card 2/2

NIKOL'SKIY, L.I.

VOLKOV, M.A.; KALLISTOV, S.D.; NIKOL'SKIY, L.I.

Practices of the Worker F.Zinov'ev factory. Tekst.prom.16 no.12:40-  
43 N°56. (MIRA 10:1)

(Ivanovo--Textile factories)

YEREMIN, N.S.; URSALOV, V.V.; NIKOL'SKIY, I.M.

Ability of some micro-organisms to produce fibrinolytic substances.  
Dokl. AN SSSR 165 no.1217-220 N '65.

(MIRA 18:10)

I. Moskovskiy gosudarstvennyy universitet. Submitted December 21,  
1964.



NIKOL'SKIY, L.N., inzhener; BOROVSKIY, V.G., inzhener.

New method of experimental testing of dynamic processes in the operation of  
Diesel hammers. Mekh.stroi. 10 no.8:16-20 Ag '53. (KLEA 6:8)  
(File driving)

NIKOL'SKIY, L.N., inzh.; KUZNETSOV, A.V., inzh.

Roll forging of blanks as preliminary operation to press forging.  
[Nauch. trudy] ENIKOMASHa 3:11-37 '60. (MIRA 14:1)  
(Forging)

NIKOL'SKIY, L. N.

The theory and design of railroad cars      Moskva, Gos. nauch.-tekhn. izd-vo mashinostroit.  
lit-ry, 1947. 295 p. (49-15194)

TF375.N5

112-57-7-14903

Translation from: Referativnyy zhurnal, Elektrotehnika, 1957, Nr 7, p 157 (USSR)

AUTHOR: Nikol'skiy, L. N., and Mezhevoy, Yu. T.

TITLE: Method for Determining Amplitude-Frequency Characteristics of Electrical Equipment Used for Recording Dynamic Processes in Machines and Installations (Metod opredeleniya amplitudno-chastotnykh kharakteristik elektro-apparatury, primenyayemoy dlya registratsii dinamicheskikh protsessov v mashinakh i sooruzheniyakh)

PERIODICAL: Tr. Bezhitsk. in-ta transp. mashinostr., 1955, Nr 13, pp 107-111

ABSTRACT: An electromechanical generator is used for electric oscillations. It consists of a disk rotating at various speeds and provided with sinusoidal teeth and a console plate with pasted-on wire tenso-pickups.

F. Ye. T.

Card 1/1

123 - 1 - 97

impact of the force which is changing in time according to a definite law; 5) the method based on the wave theory of impact. The author cites various formulations of impact phenomena, (N. N. Bukhgal'ts, Ye. L. Nikolai, L. G. Loyatsanskiy, A. I. Lur'ye, et al.), determines their diversity which makes the study of this problem difficult. For the appraisal of structure's stress conditions under impact stresses the following four criteria are established: 1) the comparison of the elastic line of a beam under impact stresses with the elastic line under static loading with a force numerically equal to the force of impact; 2) the comparison of the  $\sigma/t$  value, where  $\sigma$  [sigma] is a stress, and  $t$  [Lat.] time with its value for which the change of mechanical properties of metal become substantial; 3) the evaluation of sizes and

Card 2/3

POPOV, Aleksey Aleksandrovich, doktor tekhnicheskikh nauk, professor;  
NIKOL'SKIY, L.N., doktor tekhnicheskikh nauk, rezensent; RUBININ,  
N.V., doktor tekhnicheskikh nauk, rezensent; AFANAS'YEV, A.M.,  
kandidat tekhnicheskikh nauk, redaktor; MATVEYEVA, Ye.N., tekhnicheskiy redaktor

[Strength of materials; theory and practice] Soprotivlenie materialov;  
teoriya i zadachi. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit.  
lit-ry, 1956. 475 p. (NLBA 10:2)  
(Strength of materials)

MIKOLISKIY, L.N., doktor tekhn. nauk, prof.; MIKOLISKIY, L.N., dokt. tekhn. nauk,  
rank, dozent; BRYANSKIY, I.I., dokt. tekhn. nauk, prof.

Method for comparative examination of spring-elastic shock absorbers  
for railroad rolling stock. Izv. vuz. zap. zap. nauch. posredn. no. 8:  
122-133 1964. (MIRA 19:11)

1. Bryanskly institut transportnogo mašinstvo i avtomatiki.

**NIKOL'SKIY, L.N., professor, doktor tekhnicheskikh nauk.**

**Determining efficient parameters for friction apparatus of automatic  
couplers and calculating the forces of impact. Tekhn. zhurnal. Ser. 15  
no. 4:21-24 Ja '56. (MLRA 9:9)**

**1. Dzhitskiy institut transportnogo mashinostroyeniya.  
(Car couplings)**



NIKOL'SKIY, L.N.

NIKOL'SKIY, L.N., professor, doktor tekhnicheskikh nauk.

Methods of determining the rated magnitude of impact force  
delivered to the car through automatic coupling. Vest.TSNII  
MPS 16 no.3:39-43 My '57. (MLMA 10:5)  
(Car couplings) (Impact)

NIKOL'SKIY, L.N. prof., doktor tekhn.nauk

Calculating the force of impacts passing to railroad cars through  
automatic couplings. Trudy BITM no.17:3-12 '57. (MIRA 11:10)  
(Car couplings) (Impact)

НИКОЛАЙ Л.М. доктор техн. наук, проф.

Method of calculated determination of operational stability of  
friction units in automatic couplings. Vest. TSNIi KPS 17 no.4:  
26-28 Je '58. (MIRA 11:6)

(Car couplings)

NIKOL'SKIY, L.M., doktor tekhn. nauk, prof.: KHARITONOV, A.T., inzh.

Shock absorbers for automatic couplers with rubber-metal units.  
Vest. TSNII MPS 18 no.5:36-39 Ag '59. (MIRA 13:1)

1. Bryanskiy institut transportnogo mashinostroyeniya.  
(Car couplings)

VERSHINSKIY, Sergey Vasil'yevich, doktor tekhn.nauk; NIKOL'SKIY, Yevgeniy Nikolayevich, prof., doktor tekhn.nauk; NIKOL'SKIY, Lev Nikola-yevich, prof., doktor tekhn.nauk; POPOV, Aleksey Aleksandrovich, prof., doktor tekhn.nauk; SHADUR, Leonid Abramovich, prof., doktor tekhn.nauk; SARANTSEV, Yu.S., red.; BOEROVA, Ye.E., tekhn.red.

[Design of railroad cars for strength] Raschet vagonov na prochnost'. Pod red. A.A.Popova. Moskva, Vsesoyuzdatel'sko-poligr. ob'edinenie M-va puti soobshcheniya, 1960. 359 p.

(NIRA 14:1)

(Railroads--Cars--Construction)

SHADUR, Leonid Abramovich, doktor tekhn. nauk, prof.; CHELNOKOV, Ivan Ivanovich, doktor tekhn. nauk, prof.; NIKOL'SKIY, Lev Nikolayevich, doktor tekhn. nauk, prof.; KAYANSKIY, Georgiy Alekseyevich, kand. tekhn. nauk; KOGAN, Liber Ayzikovich, kand. tekhn. nauk; DEVIATKOV, Vladimir Fedorovich, kand. tekhn. nauk; CHIRKIN, Viktor Vasil'yevich, kand. tekhn. nauk; MORDVINKIN, N.A., inzh., retsenzent; BRAYLOVSKIY, N.G., red.; MEDVEDOVA, M.A., tekhn. red.

[Designs of railroad cars] Konstruktsii vagonov. Moskva, Vses. izdatel'sko-poligr. ob'edinenie M-va puti soobshchenia, 1962. 415 p. (MIRA 15:4)  
(Railroads—Cars—Design and construction)

NIKOL'SKIY, L.M., doktor tekhn.nauk, prof.; OZEROV, M.A., inzh.;  
DUDENKOV, V.G., inzh.

Characteristics of the changes in the forces and stresses of  
the car structure due to impacts on the automatic coupler.  
Vest. TSNII MPS 21 no.1:3-7 '62. (MIRA 15:2)

1. Bryanskiy institut transportnogo mashinostroyeniya.  
(Railroads--Cars--Construction)

NIKOL'SKIY, L.N., doktor tekhn. nauk, prof.; SELINOV, I.V., kand. tekhn.  
~~NIKOL'SKIY, L.N.~~, B.G., inzh.

Work of friction materials in a shock absorber. Vest. mashinostr.  
43 no.10:33-37 0 '63. (MIRA 16:11)



NIKOL'SKIY, L.N., doktor tekhn. nauk, prof.; LAZAR'YAN, V.A.,  
doktor tekhn. nauk, prof., retsenzent; SAMANTSEV, Yu.D.,  
inzh., red.

[Friction shock absorbers; their design and construc-  
tion] Friksionnye amortizatory udara; raschet i  
konstruirovaniye. Moskva, Mashinostroenie, 1964. 170 p.  
(MIRA 17:11)

NIKOL'SKIY, I.K., insth.; KOMEISSAROV, V.T., insth.; SHIFANOV, L.P., insth.

New forging rolls with a continuous roll forging process.  
[Nauch. trudy] ENIKKASha 11:5-13 '65. (MIRA 18:6)

NIKOL'SKIY, L.N., prof.; SELINOV, I.V., doctent

Effect of changes in the basic geometrical parameters of friction  
shock absorbers on their efficiency. Trudy BITM no.2113-9 '64.  
(MIRA 18:8)

ACC NR: AME004820

(A) Monograph

UPV

Shadur, Leonid Abramovich (Doctor of Technical Sciences; Professor); Chelnikov, Ivan Ivanovich (Doctor of Technical Sciences; Professor); Nikol'skiy, Lev Nikolayevich (Doctor of Technical Sciences; Professor), Nikol'skiy, Evgeniy Nikolayevich (Doctor of Technical Sciences; Professor); Proskurnev, Petr Grigor'yevich (Candidate of Technical Sciences, Docent); Kazanskiy, Georgiy Alekseyevich (Candidate of Technical Sciences); Devyatkov, Vladimir Fedorovich (Candidate of Technical Sciences)

Railroad cars; construction, theory, and design (Vagony; konstruktsiya, teoriya i raschet) Moscow, Izd-vo "Transport", 1965. 439 p. illus., biblio. 8,000 copies printed. Textbook for railroad transportation institutes.

TOPIC TAGS: railway equipment, railway rolling stock, railway transportation, railway vehicle data

PURPOSE AND COVERAGE: The book deals with the construction, strength calculations, dynamics, choice of technical-economic parameters, and sizes of railroad cars. It is intended for courses on "Railroad Cars" (construction, theory, calculation) for those specializing in "Railroad Car Construction and Railroad Car Management" of higher technical institutes for railway transport. It is designed to be a basic course for further specialization in special-purpose cars such as refrigerator cars, electric equipment of railroad cars, technology of construction and repair of railroad cars, and other specialties. It is designed for students who have some elementary information on car construction and car strength.

UDC: 625/23/.24

Card 1/2

ACC NR: AM6004820

TABLE OF CONTENTS [abridged]:

Introduction - - 3  
Ch. I. General information on railroad cars - - 7  
Ch. II. Dimensions - - 18  
Ch. III. Technical and economical parameters of freight cars - - 30  
Ch. IV. Principal data for strength calculations of railroad cars - - 44  
Ch. V. Wheel pairs - - 55  
Ch. VI. Axle boxes - - 89  
Ch. VII. Springs and shock absorbers - - 105  
Ch. VIII. Trucks - - 142  
Ch. IX. Frames and bodies - - 187  
Ch. X. Shock-coupling devices - - 220  
Ch. XI. Principles of railroad dynamics - - 252  
Ch. XII. Freight cars - - 337  
Ch. XIII. Tank cars - - 370  
Ch. XIV. Passenger cars - - 388  
Ch. XV. Principles of design, construction, and testing of cars - - 423

SUB CODE: 13/    SUBM DATE: 21Jul65/    ORIG REF: 218/    OTH REF: 010

Card 2/2

NIKOL'SKIY, L.N.; GAVRILOV, M.Ye.; KUZNETSOV, A.V.; PANICHEV, F.P.

Experience in and ways of introducing rotary swaging for further  
forging. Kuz.-shtam.proizv. 5 no.8:15-18 Ag '63. (MIRA 16:9)

ALEKSEYEV, A.P., otv. red.; AEROV, M.M., spets. red.; KONSTANTINOV,  
K.G., spets. red.; KUTAKOV, B.G., red.; MASLOV, N.A., red.;  
MINLER, L.P., red.; NIKOL'SKIY, L.S., red.; STAROVYTOV,  
P.A., red.; SURKOV, S.S., red.; KERANOVSKIY, A.Yu., red.;  
YUDANOV, I.G., red.; VOROB'YEV, A.T., red.

[Materials of the session of the Scientific Council of the  
Arctic Scientific Research Institute of Marine Fisheries  
and Oceanography dealing with the results of research in  
1962-1963] Materialy sessii Uchenogo soveta PINGO po rezul'-  
tatom issledovaniy v 1962-1963 gg. Murmansk, 1964. 237 p.  
(MIRA 18:1)

1. Murmansk. Polyarnyy nauchno-issledovatel'skiy i proyekt-  
nyy institut morskogo rybnogo khozyaystva i okeanografii.
2. Direktor Polyarnogo nauchno-issledovatel'skogo i proyekt-  
nogo instituta morskogo rybnogo khozyaystva i okeanografii,  
Murmansk (for Alekseyev).
3. Laboratoriya vos;roizvodstva  
Polyarnogo nauchno-issledovatel'skogo i proyekt-nogo instituta  
morskogo rybnogo khozyaystva i okeanografii, Murmansk (for Sur-  
kov).
4. Laboratoriya tekhniki procyshlemogo rybolovstva  
Polyarnogo nauchno-issledovatel'skogo i proyekt-nogo instituta  
morskogo rybnogo khozyaystva i okeanografii, Murmansk (for  
Starovoytov).

OKOROKOV, H.V., doktor tekhn. nauk, prof.: NIKOL'SKIY, L.Ye., inzh.

Studying the distribution of radiation from single-phase and  
three-phase arcs on models of cylindrical, steel-smelting furnaces.  
Izv. vys. ucheb. zav.; Chern. met. no.12:21-34 D '58.  
(MIRA 12:3)

Leningradskiy institut stali.  
(Electric furnaces--Models)  
(Heat--Radiation)



NIKOL'SKIY, L.Ye., Cand Tech Sci -- (diss) "Spatial distribution  
of power of arc radiations and ~~the~~ rational ~~the~~ dimensions of the  
free space of arc steel electric furnaces." Mos, 1959, 20 pp  
(Min of Higher Education USSR. Mos; Order of Labor Red Banner  
Inst of Steel in I.V. Stalin) 120 copies (RL, 26-59, 127)

- 68 -

24086  
S/186/60/002/006/010/026  
A051/A129

21.4200

AUTHORS: Grinberg, A.A., Vykhovskiy, D. N., Nikol'skiy, L. Ye.;  
Petrzhak, G.I.

TITLE: The formation of tetra-valent uranium oxalate from solutions  
using rongalite

PERIODICAL: Radiokhimiya, v. 2, no. 6. 1960, 687 - 690

TEXT: The authors have established the conditions of precipitation of uranium (IV) oxalate, resulting from the determination of the losses of tetra- and hexa-valent uranium in filtrates, using rongalite. It is shown that in the formation of low quantities of uranium the rongalite concentration in the solution should not be below 0.1 M. Experiments were conducted to establish the uranium losses on the filtrates after the formation of tetra-valent uranium oxalate. The results obtained show that at the given concentrations about 40 mg of uranium are left in the solution, whereby the losses seem to be connected with an increased solubility of the tetra-valent uranium oxalate in the filtrates. The experiments carried out for establishing the conditions of low-quantity formations of uranium showed that at low concentrations of uranium in

X

Card 1/3

SECRET

S/186/60/002/006/010/026  
A051/A129

The formation of tetra-valent ....

the solution the ronalite content had to be increased as compared to the theoretically computed quantity. The deviation of the stoichiometry under these conditions is said to be due to the low rate of uranium reduction and the strong effect of the side reactions taking place at the same time. Further experiments were conducted to check the uranium losses resulting from the addition of small quantities of ronalite to the uranium solution already reduced which noticeably increase due to oxidation of uranium. Ronalite was added to a hydrochloric acid solution of tetra-valent uranium. The results showed that the amount of uranium formed in this case was always less than in similar experiments without ronalite and decreased with time. The quantity of tetra-valent uranium in oxalate residues was determined with an accuracy of 0.1 mg by dissolving the residue in sulfuric acid and titrating it with potassium permanganate. Normal oxalate was obtained in each case at a ratio of

$\frac{C_2O_4}{U} = 2$ . The quantity of oxidized uranium was determined from the difference, correcting for solubility. The oxidation of uranium in the third series of experiments is thought to take place as a result of certain intermediate compounds formed in the interaction of ronalite and air oxygen. When large quantities

Card 2/3

21026

S/186/60/002/006/010/026  
A051/A129

The formation of tetra-valent ....

of ronalite are present, this phenomenon does not occur. There are 3 tables and 4 references: 3 are Soviet-bloc and 1 non-Soviet-bloc. The reference to the English language publication reads as follows: W. H. Reas. The Transuranium Elements, 423, N.Y., 1949.

SUBMITTED: October 26, 1959.

X

Card 3/3

S/148/60/000/003/018/018  
A161/1029

AUTHORS: Nikol'skiy, L.Ye.; Okorokov, N.V.

TITLE: The Shape and Dimensions of the Work Space of Electric Six-Electrode Steel-Melting Furnaces

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. - Chernaya metallurgiya,  
1960, No. 3, pp. 169 - 175

TEXT: The most common electric arc furnace type is the round furnace with three electrodes with a maximum capacity of 200-250 ton. This capacity cannot be increased without technical difficulties. In view of this fact a comparative investigation of three-electrode and six-electrode furnaces has been carried out at the Electrometallurgical Laboratory of Moskovskiy inistitut stali (Moscow Steel Institute). An elliptical 6-electrode furnace with two symmetrical groups of 3 electrodes and a round 6-electrode type were studied. The rational geometry for the 3-electrode furnace had been found previously (Ref.2). The optimum dimension correlations have been calculated for both furnace types, i.e., length and width of the elliptical work space or diameter of the round space; height from the metal bath surface to the center point of the vault. It is concluded that furnaces

Card 1/2

S/148/60/000/003/018/018  
A161/A029

The Shape and Dimensions of the Work Space of Electric Six-Electrode Steel-Melting Furnaces

of any shape may and must have an equal specific bath surface area per 1 ton of charge and equal power per 1 m<sup>2</sup> of bath surface area; furnaces of different shape are equivalent from a metallurgical point of view; the difference in heat losses through the lining is practically insignificant. The statement by J. Preston (Ref. 3) concerning the particular thermal advantages of the elliptical 6-electrode furnace compared with the round 3-electrode furnace is disproved. There are 4 figures and 3 references: 2 Soviet, 1 English.

ASSOCIATION: Moskovskiy institut stali (Moscow Steel Institute)

SUBMITTED: February 7, 1959

Card 2/2

OKOROKOV, N.V.; NIKOL'SKIY, L.Ye.; YEGOROV, A.V.

Effect of tubular electrodes on thermal processes in electric arc  
steel smelting furnaces. Is. vys. ucheb. zav.; Chern. met. 5 no.9:  
105-110 '62. (MIRA 15:10)

1. Moskovskiy institut stali i splavov.  
(Electric furnaces) (Heat—Transmission)

ISSUE NR. AR5015150

NR 0137 451000 005/V048/V046

SRCE Ref. zh. Metallurgiya 48 5V48.

P. P. Nikolin, A. A. Vlaschinskii, I. A. Bostanovskii, N. I. Nikol'skiy,

and D. P.

Application of the method of the linear theory of the heat conduction in the case of partial melting of a metal.

SRCE Ref. zh. Metallurgiya 48 5V48.

Abstract of summary of the article.

SRCE Ref. zh. Metallurgiya 48 5V48.

SRCE Ref. zh. Metallurgiya 48 5V48.

SRCE Ref. zh. Metallurgiya 48 5V48.

SRCE Ref. zh. Metallurgiya 48 5V48.

SRCE Ref. zh. Metallurgiya 48 5V48.

SRCE Ref. zh. Metallurgiya 48 5V48.

SRCE Ref. zh. Metallurgiya 48 5V48.



1 57527-53  
PROCESSION NR: AR5015150

of the bath.  $d_e$  is the diameter of the electrode,  $h$  is the actual depth of the  
slag bath,  $l$  is the distance between the face of the electrode and the surface of the  
slag bath here and in what follows, subscripts 1 and 2 refer respectively to the pro-  
jected and the actual furnace. The power  $P$ , the resistance of the slag bath, and  
the working current of the projected furnace are determined by the formula

$$P = k P_0, R_1 = \frac{1}{k} R_0, I = k I_0,$$

where  $k$  is the pressure drop between the face of the electrode and the surface is a constant  
quantity and is determined by the formula  $k_{21} = l_1 R_1 + l_2 R_2 = \text{constant}$ .  
from R. Zh. Elektrotekhnika

AIR CODE: MM, EF

ENCL 00

112

L 46001-66 ENT(m)/ENP(k)/ENP(l)/ETL JD  
ACC NR: AR6028427 SOURCE CODE: UR/0137/66/000/005/V041/V041

AUTHOR: Bochkov, D. A. ; Volokhonskiy, L. A. ; Nikol'skiy, L. Ye. JS  
B

TITLE: Simplified method for calculating the parameters of vacuum arc furnaces for melting rectangular ingots

SOURCE: Ref. zh. Metallurgiya, Abs. 5V261

REF SOURCE: Elektrotermiya. Nauchno-tekhn. sb., vyp. 48, 1965, 19-22

TOPIC TAGS: vacuum arc furnace, ingot, round ingot, energy parameter

ABSTRACT: A simplified procedure has been developed at the All-Union Scientific Research Institute of Electrothermal Equipment (VNIETO) for calculating the power energy parameters of vacuum arc furnaces for round ingots. The method, which is based on the distribution constant of arc power between the cathode and anode, allows computation of arc power without compiling the heat balance of the ingot. D. Kashayeva. [Translation of abstract] [NT]

SUB CODE: 13/

Card 1/1 ULR

UDC: 669.187.2:621.365.22-882.001.5

ACC NR: APT008868

SOURCE CODE: UR/0105/66/000/008/0093/0093

AUTHOR: Abelishvili, L. G.; Al'egausen, A. P.; Baycher, M. Yu.; Gabashvili, M. V.; Dididze, M. S.; Yefroyimovich, Yu. Ye.; Kotlya, A. K.; Kupradze, G. D.; Kurdiani, I. S.; Kutushil, A. V.; Nikol'skiy, L. Ye.; Rasmadze, Sh. M.; Svanchanskiy, A. D.; Smolyanskiy, M. Ya.; Tkashelashvili, G. K.

ORG: none

TITLE: Professor Grigoriy Arsenyevich Sisoyan (on his 70th birthday)

SOURCE: Elektrichestvo, no. 8, 1966, 93

TOPIC TAGS: electric engineering personnel, electric furnace, academic personnel

SUB CODE: 09

ABSTRACT: G. A. Sisoyan graduated from the Moscow Power Engineering Institute in 1931. In 1932 he went to work at the Georgian Polytechnical Institute in the theoretical and general electrical engineering department. Sisoyan has worked and published many works in the area of electric furnaces. He has also worked in the area of investigation of electric spark action. He has published over 30 scientific works. He has also been active in university level teaching. Orig. art. has 1 figure. [JPRS: 18,330]

UDC: 621.36

Card 1/1

S/052/60/026/010/025/035  
B016/B054

**AUTHORS:** Poluektov, N. S., Ovchar, L. A., Kuchment, M. M., and Nikol'skiy, M. A.

**TITLE:** The Use of a Spectrophotometer CΦ-4 (SF-4) for the Purposes of Flame Photometry

**PERIODICAL:** Zavodskaya laboratoriya, 1960, Vol. 26, No. 10, pp. 1152-1154

**TEXT:** Spectrophotometers with automatic scanning of the spectrum and spectrum recording offer special advantages in flame photometry. The following instruments are produced in the USSR: MCΠ-51 (ISP-51) with an accessory instrument ΦЭΠ-1 (FEP-1); ΠС-384 (PS-384) and the spectrophotometers СП-61 (SP-61), ДФС-4 (DFS-4), and ДФС-14 (DFS-14). Their suitability for flame analysis has, however, not yet been clarified. Previously (Ref. 5), the authors had described a recording instrument which was constructed on the basis of a universal monochromator УМ-2 (UM-2). This instrument is particularly suited for the determination of some individual rare-earth elements. The authors designed an

Card 1/3

The Use of a Spectrophotometer  $C\Phi-4$  S/052/60/026/010/023/035  
(SF-4) for the Purposes of Flame Photometry B016/B054

instrument of a similar type having quartz optics and permitting the determination of elements on the basis of lines of the ultraviolet part of the spectrum. For this purpose, they used a spectrophotometer for absorption measurements  $C\Phi-4$  (SF-4). The photocells were replaced by photomultipliers  $\Phi\Delta Y-10$  (FEU-10) for the visible and ultraviolet spectrum range, as well as  $\Phi\Delta Y-22$  (FEU-22) for the infrared range. The output of the photomultiplier was led into the cathodic repeater which was connected with the input of the electronic recording potentiometer  $\Pi C1-02$  (PS1-02). The photomultipliers were fed by a high-voltage rectifier  $BC\Delta-2500$  (VSE-2500). Fig. 1 shows a block diagram of the apparatus. The revolving mechanism for the drum of the wavelength scale is shown in Fig. 2. Table 1 gives the times required for adjusting the picture of the spectral line to the exit slit (0.1 mm) for different wavelengths. Table 2 shows the sensitivity of determination for individual elements. Table 3 shows the reproducibility of line-recording for copper and magnesium. The attainable accuracy is higher than that of ordinary spectrophotometers. The design suggested guarantees determination of various elements with high accuracy. There are 3 figures, 3 tables, and 5 references, 1 Soviet and 4 US. ✓

Card 2/3

The Use of a Spectrophotometer CФ-4 S/052/60/026/010/025/035  
(SF-4) for the Purposes of Flame Photometry B016/B054

ASSOCIATION: Institut obshchey i neorganicheskoy khimii Akademii nauk  
USSR  
(Institute of General and Inorganic Chemistry of the  
Academy of Sciences UkrSSR)

Card 3/3

VYATKIN, G.P.; OSTROUKHOV, M.Ya.; Prinsipali uchastiya: KHOLZAKOV, V.I.;  
KOPYRIN, I.A.; TARASHCHUK, N.T.; FILIPPOV, Yu.P.; NIKOL'SKIY, M.A.;  
CHISTYAKOV, A.Ye.; FIDENOV, L.I.

Investigating the process of blast furnace smelting for  
the production of nickel matte. [Sbor. trud.] Nauch.-issl.inst.mst.  
no.4:71-81 '61. (MIRA 15:11)

(Nickel—Metallurgy)  
(Blast furnaces)

GUBCHEVSKIY, P.V., insh.; KAZANOVSKIY, L.V., insh.; NIKOL'SKIY, M.A., insh.;  
YAKUSHOVA, K.A., insh.

Casting of slab molds for large ingots of liquid blast furnace  
cast iron. Stal' 23 no.3:274-278 Mr '63. (MIRA 16:5)

1. Magnitogorskiy metallurgicheskiy kombinat i Ufaleyskiy  
metallurgicheskiy zavod.  
(Ingot molds) (Iron founding).



IVANOV-KHOLODIYY, G.S.; NIKOL'SKIY, M.G.

Ultraviolet solar radiation and the transition layer between  
the chromosphere and corona. Astron. zhur. 38 no. 1:45-65  
Jan '61. (TIA 14:2)

I. Institut zemnogo magnetizma, ionosfery i rasprostraneniya  
radiovoln AN SSSR i Institut prikladnoy geofiziki AN SSSR.  
(Sun)

NIKOL'SKIY, M.I.; KARAYAYEV, H.H.

The LPL continuous production line for making long macaroni.  
Bul.tekh.-ekon.inform. no.6:47-49 '58. (NINA 11:6)  
(Macaroni)

AUTHOR: Nikol'skiy, M.I. SOV-117-58-8-15/28

TITLE: A Die for Punching Openings in U-Irons (Shtamp dlya probivki otverstiy v shvellerakh)

PERIODICAL: Mashinostroitel', 1958, Nr 8, pp 34-35 (USSR)

ABSTRACT: Rectangular valves in dust-gas-air ducts of electric power stations are made of U-irons, Nr 18-30. For the fastening of roller bearings in the U-irons, openings of 18 and 20 mm in diameter must be made (Figure 1). The boring of these openings is very laborious and does not ensure the required exactness. For this reason, a universal die has been developed for the punching of these openings. The distance between the openings is ensured by exchangeable fixing girders. These girders are connected by two bolts M20 and two joint pins to the lower part of the die. For removing the U-irons from the die after punching, a rigid stripping device has been installed. The use of this die reduces the work for each U-iron by 39 man-hours. There are 2 diagrams and 1 photo.

**1. Dies - Applications**

Card 1/1

GAVRILOV, N.I.; GLUSHAYOV, P.I.[deceased]; KOSOLAPOV, B.Ye.;  
NIKOL'SKIY, M.I.; SHCHUKIN, Ye.A.; ZABEROV, B.Sh., red.;  
KOSTINSKIY, D.N., red; ZHURAVLEVA, G.P., mlad. red.;  
GOLITSIN, A.V., red. kart; BURLAKA, N.P., tekhn. red.

[Countries of North and Northeast Africa; geographical information] Strany Severnoi i Severo-Vostochnoi Afriki; geograficheskie spravki. Moskva, Geografiz, 1962. 39 p. (MIRA 15:7)  
(Africa, North—Geography, Economic)

ELISHCHENKO, I.P.; BOCHAROV, I.N.; OLUSHAKOV, P.I.; MIRONOV, V.S.;  
NIKOL'SKIY, M.M.; NIKOL'SKIY, M.M.; PUCHKOV, I.B.; CHERNIKOV,  
G.P.; SHCHETININ, V.D.; YEPIFANOV, M.P., red.; ROMANOVA, N.I.,  
tekhn.red.

[Africa 1960: concise reference book; territory, population,  
economy, governmental system, foreign policy] Afrika 1960;  
kratkii spavochnik. Territoria, naselenie, ekonomika, gosu-  
darstvennyi stroi, vneshniaia politika. Moskva, Izd-vo In-  
ta mezhdunarodnykh otnoshenii, 1960. 133 p.

(MIRA 1463)

(Africa)

1. MIKOL'SKIY, M. N.
2. USSR (600)
4. Sheep - Diseases
7. Paratyphoid of sheep, Veterinarlia, 29, No. 11, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

NICOL'SKIY, M.E., kandidat veterinarnykh nauk.

Results of treating infectious mastitis in sheep. Veterinariia  
30 no.9:55 S '53. (MLRA 6:8)

"APPROVED FOR RELEASE: Tuesday, August 01, 2000

CIA-RDP86-00513R001137

APPROVED FOR RELEASE: Tuesday, August 01, 2000

CIA-RDP86-00513R0011372



NIKOLSKIY, M. N.

P-4

USSR/Microbiology - Medical and Veterinary Microbiology

Abs Jour : Referat Zhurn- Biol., No 16, 25 Aug 1957, 68607

Author : Nikolskiy, M.N.  
Title : The preparation and Tests of a Serum against Sheep Paratyphus.

Orig Pub : Tr. Stavropolsk. kraevol n.-i. vet. st., 1956, 3,  
323-345

Abstract : No abstract.

Card 1/1

- 64 -

NIKOL'SKIY, M.N., kand.veterinarnykh nauk

Rationalizing laboratory methods for the diagnosis of diplococcus  
infection in lambs. Veterinariia 39 no.12:65-67 D '62. (MIRA 16:6)

1. Stavropol'skaya krayevaya nauchno-issledovatel'skaya  
veterinarnaya stantsiya.  
(Diplococcus) (Lambs--Diseases and pests)

NIKOL'SKAYA, Yevgeniya Anatol'yevna ; NIKOL'SKIY, Mikhail Osipovich;  
SHELOMOVA, I.N., red.; ANDREYKVA, L.S., tekhn. red.

[Book on the standards of cultured living] Kniga o kul'ture  
byta. Moskva, Profizdat, 1963. 277 p. (MIRA 16:6)  
(Home economics)

NIKOL'SKIY, M.S. (Moscow)

Probability of a Markov point hitting a plane region of small  
diameter. Teor. veroiat. i ee prim. 9 no.2:352-357 '68  
(MIRA 17:7)

L 141269-66 EXT(d) IJP(c)

ACC NR: AP6023964

SOURCE CODE: UR/0376/66/002/004/0439/0452

AUTHOR: Mishchenko, Ye. F.; Nikol'skiy, M. P.ORG: Mathematical Institute im. V. A. Steklov (Matematicheskiy institut)TITLE: A small-parameter problem for parabolic differential equationsSOURCE: Differentsial'nyye uravneniya, v. 2, no. 4, 1966, 439-452TOPIC TAGS: parabolic differential equation, probability, mathematic space, *SMALL PARAMETER, EUCLIDEAN SPACE*

ABSTRACT: The  $n$ -dimensional Euclidean space  $R^n$  contains two objects: a  $k$ -dimensional twice-continuously differentiable manifold  $M$  changing its form and position according to the  $M = M_t$  law, and a Markovian-type random point whose probability density  $p(\sigma, x, \tau, y)$  satisfies the Kolmogorov equation

$$\frac{\partial p}{\partial \sigma} + a^i(\sigma, x) \frac{\partial p}{\partial x^i} + b^i(\sigma, x) \frac{\partial p}{\partial x^i} = 0. \quad (1)$$

It is assumed that the  $n$ -dimensional  $\epsilon$ -neighborhood  $U(M)$  of  $M$  moves together with  $M$ . The author calculates the probability that the random point enters into the neighborhood of  $U(M)$  during the time interval  $\sigma \leq S \leq \tau$ . The paper presents in more detail the results published earlier (F. Mishchenko, DAN SSSR, 159, 2, 266-268, 1964). The main term of the probability discussed is derived. Orig. art. has: 84 formulas.

SUB CODE: 12/ SUMM DATE: 10Jan66/ ORIG REF: 005/ OTH REF: 001

Card 1/1

UDC: 517.946.43

MECHIGIY, N. A.

"Organization of the Geological Work for the Mine at Mt. Napit," Gor. Zhur.,

No. 6, 1949., Engr.

NIKOL'SKIY, N.A.

The Committee on State Inventions of the Council of Ministers USSR in the field of science and inventions announced that the following scientific works, papers, scientific books, and textbooks have been admitted to competition for the years 1961 and 1962: Sovetskaya Kultura, Moscow, 1961, No. 1, p. 10.

<u>Name</u>	<u>Title of Work</u>	<u>Evaluated by</u>
Zurkov, P.E. Popov, S.I. Golovin, G.M. Karpov, A.F. <u>Nikol'skiy, N.A.</u> Shitov, I.S. Bulychev, V.V. Ogiyevskiy, V.M. Treyvus, M. N. Shtremt, A.A. Trofimov, G.V. Pushkarev, G.I. Markman, N.Ye. Tikhovidov, I.I.	"The Working of Iron Ores by the Open Pit Method"	Magnitogorsk Mining Metallurgical Institute imeni G.I. Nosov

CC: 4-1-1964, 7 July 1964

ИСТОРИЯ, И. А.

BULYCHEV, V.V.; GOLOVIN, G.M.; KURKOV, P.N.; KARPOV, A.F.; NI-  
KOL'SKIY, N.A.; OSIYEVSKIY, V.M.; POPOV, S.I.; SREYVOS, N.N.;  
SITNOV, I.S.; SHTREMY, A.A.; KURKOV, P.N., kandidat tekhnicheskikh nauk, redakter; KOMPANYSYTS, V.P., kandidat tekhnicheskikh nauk, retsentsent; VAGANOV, P.V., kandidat tekhnicheskikh nauk, retsentsent; IKHNIKOV, A.N., kandidat tekhnicheskikh nauk, retsentsent; SAUKHAT, I.G., kandidat tekhnicheskikh nauk, retsentsent; NIKOLAYEV, S.I., retsentsent.

[Mining iron ore by the opencast method] Razrabotka shelaznykh rud otkrytym spetsobom. Fed. obshchest red. P.N.Kurkova. Sverdlovsk, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1953. 632 p. (MLRA 7:8)  
(Iron mine and mining)



**NIKOL'SKIY, N.A.**

Magnitogorsk--Iron mines and mining

**Geological operations and the organization of averaged ore  
extraction. Ger. shur. no.10:3-11 0 '55 (MLBA 9:2)**

**1.Glavnyy geolog Magnitogorskogo rudnika.  
(Magnitogorsk--Iron mines and mining)**

NIKOL'SKIY, N. A., Cand Tech Sci -- (diss) "Bases for the organization of internal mining neutralization of iron ore." Magnitogorsk, 1960. 30 pp with graphs; (Ministry of Higher and Secondary Specialist Education RSFSR, Magnitogorsk Mining-Metallurgy Inst in G. I. Nosov); 150 copies; price not given; (KL, 17-60, 157)

S/169/63/000/002/085/127  
D263/D307

AUTHOR: Nikol'skiy, N. A.

TITLE: Sampling of exploitational workings in the iron ore deposit of Magnitnaya mountain and means of its further development

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 2, 1963, 14-15, abstract 2D85 (In collection: Vopr. metodiki oprobovaniya rudn. mestorozhd. pri razvedke i ekspluat., M., Gosgeoltekhizdat, 1962, 143-150)

TEXT: A description is given of methods of sampling of blasting wells and cuts, of the use of correlational dependence for determining the contents of silica and calcium oxide in the ores, of the method of determining the yield of third grade ore and its iron content, and of the determination of enrichability of ores and 'panning out ability' of placers. A method is given for the calculation of correction coefficients, used when the ore changes during extraction, and actual values are quoted. The chief problem of sampling of exploitational working is a rapid and early qualitative

Card 1/2

NIKOL'SKIY, N.A.

Iron ore blending in the Magnitogorsk mine. Stal' 22 no.8:692-693  
Ag '62. (MIRA 15:7)

1. Gornoye upravleniye Magnitogorskogo metallurgicheskogo kombinata.  
(Magnitogorsk region--Iron mines and mining)

VOICHNIK, I., kandidat tekhnicheskikh nauk; NIKOL'SKIY, N., kandidat  
tekhnicheskikh nauk; PUSHEV, M., ~~INZHINER~~.

Develop the production of heat and sound insulating materials.  
Stroi.mat., izdel.i konstr. 1 no.11:22-24 N '55. (NERA 9:5)  
(Insulation (Heat)) (Insulation (Sound))

**AUTHORS:**

Vel'ticheva, V.A. (Engineer)  
Kalakutskaya, N.A. (Cand.Tech.Sci.)  
Nikel'skiy, N.A. (Cand.Tech.Sci.)

SOV/96-58-10-20/25

**TITLE:**

The thermal conductivity of mercury (Teploprovodnost' rtuti)

**PERIODICAL:**

Teploenergetika, 1958, No.10. pp. 60-62 (USSR)

**ABSTRACT:**

Mercury is becoming increasingly important as a heat-transfer medium. The considerable work which has already been done on its thermal conductivity is reviewed, and errors on the part of the present authors and others are revealed. One assumption was that a layer of liquid paraffin floating on the top of mercury would prevent it from evaporating, but special tests showed that this is not so. Tests were, therefore, made in which the possibility of the evaporation of the mercury was excluded. Two methods were used, one a compensation method similar to that of Hall and Ewing, and the other a method of successive steady states developed in the Power Institute of the Academy of Science of the USSR. A diagram of the equipment used for the compensation method is given in Fig.1. The sample is a hermetically sealed cylinder of stainless steel filled with mercury. The test procedure and the measurements are stated, also the formula used to calculate the thermal conductivity. Results obtained by various methods are plotted in Fig.2., showing good agreement between the different methods. The tests cover the temperature

Card 1/2

The thermal conductivity of mercury.

SOV/96-58-10-20/25

range of 60 - 430°C. The results are 10 - 15% below those of Hall and coincide with those of Ewing over the range 150 - 540°C. An expression is given for the curve that fits the experimental results. Pressure has little effect on the thermal conductivity. A table of the most reliable values of the thermal physical properties of mercury is given. There are 2 figures, one table and 3 Soviet references.

ASSOCIATION: Power Institute, AS. USSR (Energeticheskiy Institut, AN SSSR)

Card 2/2

807/1026

FRANS J BOOR EXPLOITATION

Abstracts and 3038. Energetically Institut

Supplement 1. Hydrodynamics (Heat Transfer and  
Mechanics of Heat Processes) Moscow, 1949-50, 313, 1937.  
419 p. Great slip inserted. 3,300 copies printed.

Prof. M. S. A. Rizner, Academician, M. of Publishing  
House: S. A. Izvestia, No. 1 G. B. Shvachko.

FRANS J BOOR is interested in problems connected with heat  
transfer, heat conduction, and hydraulics of liquid media, etc.  
FRANS J BOOR is interested in the theory of heat conduction  
and boiling. This collection is dedicated to the memory of Academician  
S. P. Rizner and in the limited edition the efficiency of  
investigation of heat transfer in the various branches of research work in  
this field. The special collection devoted to works of Rizner's  
colleagues has been published, one in 1978. Materially overabundant  
in hydrodynamics (Materials of the Conference on Boiling) and in  
1971. Theory of heat conduction (Theory of Heat Conduction  
and Boiling). The present collection prepared in 1974 represents  
further development of the work of this school. This theory is  
fundamental for the analysis of many heat problems in the field of  
chemical and radio engineering. Of great importance are the  
first systematic investigations of heat transfer and the  
hydrodynamics of liquid media which as a new kind of heat carrier  
may be used in the various branches of modern engineering. As a  
result of special investigations of some cases of convective  
heat transfer, a dependence of the process on the kind of liquid,  
temperature, pressure, direction of the heat flow, and other  
factors, was discovered and established. On the basis of a wide  
generalization of experimental data, new dependence recommendations  
for heat analysis of engineering equipment in boiling, liquid  
film, and film boiling. The present collection is devoted to the  
theory of heat conduction. All investigations are based on  
the theory of similarity, the nature of which, according to S. P.  
Rizner, is that of "experimentalism." Work on the theory of  
a regular regime applied to a system of bodies with an internal  
source of heat is of interest for the future.

Card 2/79

Heat Transfer (Cont.)

807/1026

FRANS J BOOR. A. New Method of Determining the Heat Conductivity  
Investigation of the heat-physical characteristics of solid  
media used as heat carriers in structures of engineering heat  
exchangers. This method is based on the measurement of heat  
conductivity of solid media which cannot be generalized to include  
a large variety of media and alloys because of many  
circumstances which make the results uncertain. The new method  
of convective stationary states presented here is based on the  
well-known stationary method of a plate. In this method,  
the measurement of heat conductivity depends on the gradient  
of temperature in the thickness of the layer. In experiments  
this gradient is measured by thermocouples. Results of two  
experiments with stainless steel 1. 1. T. are described. These  
experiments were made in temperature intervals of 110 ± 800°C.  
There is 1 Soviet reference.



NOV/96-59-2-16/18

**AUTHORS:** Nikol'skiy, N.A., Candidate of Technical Sciences  
Kalakutskaya, N.A., Candidate of Technical Sciences  
Pchelkin, I.M., Engineer,  
Klassen, T.V., Engineer, and  
Vel'tishcheva, V.A., Engineer

**TITLE:** The Thermal Physical Properties of Molten Metals (Teplo-fizicheskiye svoystva rasplavlennykh metallov)

**PERIODICAL:** Teploenergetika, 1959, Nr 2, pp 92-95 (USSR)

**ABSTRACT:** At the Power Institute Academy of Sciences USSR studies have been made of the thermal-physical properties of a number of metals and alloys in the molten condition. The extensive experimental data obtained has been critically analysed and presented in the form of tables. This article gives the thermal physical properties of mercury, lead, bismuth, tin, lithium, sodium and potassium and alloys of sodium and potassium and lead and bismuth, see tables 1 to 9. The values of specific gravity, specific heat, coefficient of thermal conductivity and coefficient of kinematic viscosity are considered to be the most reliable ones available. Test methods used to

Card 1/2

SOV/96-59-2-16/18

The Thermal Physical Properties of Molten Metals

determine some of the properties are briefly described and a diagram of the apparatus for measuring the specific gravity of molten metal by a volumetric method is given in Fig 1 and the apparatus for the displacement method in Fig 2. The equipment used for determining the thermal conductivity of molten metal is shown in Fig 3 and a further method in Fig 4. The equipment for determination of the specific heat of molten metal is shown in Fig 5. There are 5 figures and 12 references of which 7 are Soviet, 3 German, 1 English and 1 French.

Card 2/2

NIKOL'SKIY, N.A.

The role storage piles play in the averaging of ores. Gor. zhur.  
no.6:75 Je '64. (MIRA 17:11)

1. Glavnyy geolog Gornogo upravleniya Magn togorskogo metallurgi-  
cheskogo kombinata.

L 43753-66 INT(E)/EXP(a)/EXP(w)/S/EXP(t)/INT SOURCE CODE: UR/0000/66/000/000/0083/0091  
ACC NR: AT6029313

40  
E/

AUTHOR: Nikol'skiy, N. A.

ORG: none

TITLE: Experimental determination of the thermal conductivity of liquid aluminum in the temperature range of 725-1570C

SOURCE: Moscow. Energeticheskiy institut. Teploobmen v elementakh energeticheskikh ustanovok (Heat exchange in power installation units). Moscow, Izd-vo Nauka, 1966, 83-91

TOPIC TAGS: thermal conductivity, liquid aluminum, aluminum thermal conductivity, liquid metal coolant

ABSTRACT: A new method was developed for investigating the temperature dependence of the thermal conductivity of liquid aluminum in the temperature range of 725-1570C. According to this method, the steady-state temperature field along the height of the column of liquid aluminum, and the heat flux passing through its cross section were determined on the basis of pyrometric measurements in the calorimetric system of the experimental set-up. The calorimetric system consists of a graphite heater and a graphite cylinder containing the column of liquid aluminum being tested. On the outside, the calorimetric system

Card 1/2