

KIZUB, F.; SHCHEKUTEV, Ya.; REPICHEV, A.; KOROSTELEV, I.; MARTYNIENKO, P.  
TARANIK, F.; TYRINOV, P.; POPOVKIN, N.

Hidden potentialities for the economy of working time. Den. 1  
kred. 19 no.3:50-62 Mr '61. (MIRA 14:3)

1. Zamestitel' glavnogo bukhgaltera Ukrainskoy respublikanskoy kontory Gosbanka (for Kizub). 2. Glavnyy bukhgalter Ryazanskoy oblastnoy kontory Gosbank (for Shohokutov). 3. Glavnyy bukhgalter Starorusskogo otdeleniya Gosbanka Novgorodskoy oblasti (for Repichev). 4. Glavnyy bukhgalter Gul'kevichskogo otdeleniya Gosbanka Krasnodarskogo kraya (for Korostelev). 5. Zamestitel' glavnogo bukhgaltera Krasnoyarskoy krayevoy kontory Gosbanka (for Martynenko). 6. Glavnyy bukhgalter Pereyaslav-Khmel'nitskogo otdeleniya Gosbanka Kiyevskoy oblasti (for Taranik). 7. Glavnyy bukhgalter Tonshayevskogo otdeleniya Gosbanka Gor'kovskoy oblasti (for Tyrinov). 8. Glavnyy bukhgalter Novo-Ukrainskogo otdeleniya Gosbanka Kirovogradskoy oblasti.

(Banks and banking--Accounting)

(Machine accounting)

TYRKA, E.

Scientific technical conference on problems of technical progress in  
the field of dyes and lacquers. Przem chem 41 no.3:161 Mr '62.

TYRKIEL, Oktawiusz

Gallnut as raw material in preparation of tannins. Acta Poloniae  
pharm. 12 no.1:23-27 1955.

1. Z Zakladu Farmakognozji A.M. we Wroclawiu. Kierownik: prof. dr  
T.Bodalski.

(TANNIN, preparation of,  
from gallnut)

BOLDYREV, T.Ye., BESSMERTNYI, B.S., SHATROV, I.I., TYRKOVA, I.S.

Relation between social and biological factors in the epidemic process.

Zhur.mikrobiol. epid. i immun. 29 no.6:112-117 Je '58 (MIRA 11:7)

(EPIDEMIOLOGY,

soc. & biol. aspects of epidemic (Rus))

Country : USSR  
Category : Microbiology. Microbes Pathogenic For Man and Animals.  
General Problems.  
Abs. Jour : Ref Zhur-Biol., No 23, 1958, No 103794  
Author : Boldyrev, T. Ye.; Bessmertnyy, B.S.; Shatrov I.I.; Tyrkova, Ye.S.  
Institut. : —  
Title : Interrelations of Social and Biological Factors in the  
Epidemic Process  
Orig Pub. : Zh. mikrobiol., epidemiol. i immunobiol., 1958, No 6,  
112-117  
Abstract : No abstract.

Card: 1/1

F-40

TYRKOVA, Ye.S.

A method of studying of seasonal increase in the incidence of  
dysentery. Zhur.mikrobiol.epid. i immun. 28 no.5:58-61 My '57.  
(MLRA 10:7)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei  
AMN SSSR.

(DYSENTERY, epidemiol.  
seasonal variations, study)

SLAVIN, G.P. [deceased]; TYRKOVA, Ye.S.

Epidemiological analysis and its significance in the problem of eradicating infections. Report No.2: Method for an epidemiological examination of sporadic foci. Zhur. mikrobiol., epid. i immun. 32 no.9:121-124 S '61. (MIRA 15:2)

(EPIDEMIOLOGY)

TYRKOVA, Ye.S.; MILENUSHKIN, Yu.I.; KOVTUNOVICH, L.G.; ZAKHVATKIN, S.V.

Out-of-town session devoted to the 40th anniversary of the Great  
October Socialist Revolution. Zhur.mikrobiol.epid. i immun. 28 no.  
9:153 S '57. (MIRA 10:12)  
(COMMUNICABLE DISEASES)



TYRKOVA, Ye.S.

Water factors in the epidemiology of dysentery; author's abstract.  
Zhur.mikrobiol.epid.i immun. 31 no.11:148 N '60. (MIRA 14:6)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN  
SSSR.

(WATER—POLLUTION)

(DYSENTERY)

SLAVIN, G.P. [deceased]; TYRKOVA, Ye.S.

Epidemiological analysis and its significance in eliminating infections.  
Report No.1: Theoretical and organizational premises in developing a  
method for epidemiological analysis. Zhur. mikrobiol. epid. i immun.  
32 no.7:3-6 Je '61. (MIRA 15:5)

(EPIDEMIOLOGY)

BEZDENEZHNYKH, I.S.; TYRKOVA, Ye.S.; BEL'CHENKO, N.I., red.;  
BLAZHENKOVA, G.I., tekhn. red.

[Protection of the population from bacteriological  
weapons] Zashchita naseleniia ot bakteriologicheskogo oru-  
zhiia. Moskva, Izd-vo DOSAAF, 1963. 46 p. (MIRA 16:10)  
(Biological warfare)

TYRKOVA, Ye., kand.med.nauk

A bacteriological focus. Voen.znan. 40 no.11:28-29 N '64.

(MIRA 1811)

ARTICLE

Author: [Faint text]

TITLE: [Faint text]

SUBJECT: [Faint text]

NOTE: [Faint text]

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ACQUISITION OF...

breath filters, bacteriostatic... individual preparations, and... individual protection means... "Dezentok" type respirators, cotton gauze... fabric masks (PM-1) and special... collective protection... and additional... with air... biological... personnel, and... MIAA, and...

ASSOCIATION...

SUBMITTING...

AR-RDP...

TYRLIK, O.

Fourth Scientific Conference of Students at the Faculty of  
Mining and Geology of the Higher School of Mining in Ostrava.  
Uhli 7 no.3:108 '65.

TYRLIK, O.

Fourth scientific conference of students of the Faculty of Mining  
and Geology of the Higher School of Mining, Ostrava. Rudy 13 no.2:  
71 F '65.

1. Faculty of Mining and Geology of the Higher School of Mining,  
Ostrava.



TYRLIS, R.

Precisions casting of the parts for the motor industry and tools by the application of ceramic coatings on water glass in the Zeran Passenger Automobile Factory. p. 114.

(PRZEGLAD ODLEWNICTWA. Vol. 7, No. 5, May 1957. Warszawa, Poland)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 10, October 1957. Uncl.

TYDLIK STANISLAW

[The remainder of the page contains extremely faint and illegible text, possibly bleed-through from the reverse side of the document.]

MALINOWSKI, Stanislaw; KEHL, Jerzy; TYRLIK, Stanislaw

Research on the condensation of formaldehyde. I. Roczniki chemii 34 no.2:  
391-400 '60. (EEAI 10:1)

1. Zaklad Technologii Organicznej I Politechniki, Warszawa.  
(Formaldehyde)

USSR / Farm Animals: Small Horned Stock.

Q-3

Abs Jour: Ref Zhur-Biol., No 12, 1958, 54806.

Author : ~~Tyrlovoy, N. A.~~

Inst : Not given.

Title : Green Corn in the Rations of the Meat-Wool  
Type of Lambs.

Orig Pub: Ovtsevodstvo, 1956, No 8, 37-40.

Abstract: A study was conducted on the yearly lambs of the Precoce breed. The first group of lambs was fed green corn, the second group - corn plus soybean oil meal, and the third group - corn plus clover aftermath. As to weight measurements, and wool yield, the animals of the first group were lagging behind the yearlings of the second and third groups. The best

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USSR / 1958 / 12 / 12 / 1958 / 54806

Abs Jour: Ref Zhur-Biol., No 12, 1958, 54806.

Abstract: result was obtained by feeding lambs with green corn, sowed as a mixture with legumes, or without them, but with the addition of feeds more complete in their protein content.

Card 2/2

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MACIEBREWICZ, Maria; OZIERMSKA-LOZINSKA, Halina; TYRMAN, Jadwiga

Bacteriological evaluation of diagnostic methods in diphtheria. Med. dosw. mikrob. 10 no.2:213-221 1958.

1. Z Miejskiego Szpitala Zakaznego Nr 3 w Warszawie Dyrektor: dr med. M. Pomeraka.

(DIPHTHERIA, diagnosis,  
bacteriol. evaluation (Pol))

TYRMAN, Witold, inż.

The Polish radioelectronic industry at the 31st International Poznan  
Fair. Przegł telekom 34 [i.e. 35] no.5:129-140 My '62

TYRMAN, Witold, inz.

Mechanization, automation, standards in the electronic industry.  
Przełł techn 81 no.12:5-8 Mr '60.



TYRMAN, Witold

Circuit printing and wiring automation of electronic equipment  
seen from technological and economic aspects. Przegl  
elektroniki 2 no.4:334-347 Ag '61

1. Zjednoczenie Przemyslu Elektronicznego i Teletchnicznego, Warszawa.

TYRNAUER, Janos, dr.

Physiology of stunt flying. *Reprints 17 no.8:17-18 Ag '64.*

TYRO, Gustaw, dr inż.

Effect of the form of the bulldozer blade on the flow of soil and consequent motion resistance as well as the stability conditions in the process of loosening the worked ground. Przegl mech 24 no.6:186 25 Mr '65.

1. Department of Building and Road Construction Machines of the Warsaw Technical University.

S/081/63/000/001/048/061  
B144/B186

AUTHORS: Tyroler, Jiří, Formánek, Zdeněk, Vondráková, Zdena,  
Zahradník, Lubomír, Štovík, Miroslav

TITLE: Production of pure germanium dioxide from germanium concentrates

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 1, 1963, 347, abstract 1L38 (Czechosl. patent 101148, October 15, 1961)

TEXT: Ge concentrates are distilled continuously with concentrated HCl (ratio 1 : 1 - 2) with simultaneous bubbling of  $\text{Cl}_2$  (gas) through the solution or addition of oxidants ( $\text{K}_2\text{Cr}_2\text{O}_7 + \text{H}_2\text{SO}_4$ ). The  $\text{GeCl}_4$  vapors together with HCl, vapors  $\text{Cl}_2$  and impurities are washed out of the gas mixture by organic solvents ( $\text{CCl}_4$ ); then, the  $\text{GeCl}_4$  dissolved in the organic solvent is washed with HCl (acid) and hydrolyzed. Example. The apparatus comprises 2 containers with agitators of 70 l capacity (the mixture is tapped from one container, while at the same time the other

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Production of pure germanium ...

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tank is filled), a metering pump, a cooking boiler, a foam separator and an absorber. In the containers, the mixture of 25-30 kg concentrate and 50 kg HCl (acid) is prepared. The absorber is filled with  $\text{CCl}_4$ . The operation of the metering pump and the heating of the boiler is controlled in such a way that the foam entering the separator has a temperature of  $100^\circ\text{C}$ . From the separator the suspension is drained-off to waste, but the vapors are led into the absorber, from which  $\text{GeCl}_4$  dissolved in  $\text{CCl}_4$  is drawn off intermittently or continuously and hydrolized thrice with distilled water. The product contains 0.005 - 2% As and is a suitable raw material for semiconductors. [Abstracter's note: Completo translation.]

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Z/009/62/000/002/001/002

E112/E453

183100  
AUTHORS:

Zahradník, Lubomír; Formánek, Zdeněk; Štovík, Miroslav;  
Tyroler, Jiří; Vondráková, Zdena

TITLE:

Refining of germanium dioxide

PERIODICAL: Chemický průmysl, no.2, 1962, 60-63

TEXT: For semiconductors extremely pure germanium of 99.9999999999% purity, usually called "eleven nines", is required. The production of this pure metal, carried out by reduction of germanium dioxide and zone refining of obtained germanium, is economical only if an oxide with at least three nines is used as starting material. Therefore, germanium dioxide is refined for the elimination of various contaminants, above all of arsenic. The following preliminary refining methods were studied on a laboratory scale: 1) elimination by reduction with Zn, Al or SnCl<sub>2</sub>; germanium tetrachloride is unaffected by the above reducing agents, while AsCl<sub>3</sub> is reduced to arsenic; 2) absorption of AsCl<sub>3</sub> and GeCl<sub>4</sub> in carbon tetrachloride, followed by oxidative extraction with HCl and HNO<sub>3</sub>. In this procedure AsCl<sub>3</sub> is oxidized to the water-soluble H<sub>3</sub>AsO<sub>4</sub> which can be extracted with

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Materials, Prague)

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E112/E135

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only 1087

AUTHORS:

Zahradník, Lubomír, Formánek, Zdeněk, Šťovík, Miroslav,  
Tyroler, Jiří, and Vondráková, Zdena

TITLE:

Properties of furnace flue dusts and their use for the  
recovery of germanium

PERIODICAL: Chemický průmysl, 1961, No.7, pp. 337-341

TEXT:

Coal which is rich in germanium was ashed in a reducing atmosphere and coarser fractions were separated by means of cyclones. Flue dust of finer particle size was recovered by electrostatic separation and this contained up to 1% germanium. Industrial recovery of germanium was considered feasible and therefore laboratory methods for its extraction and the nature of the bond between germanium and the flue dust particles were studied. The flue dust was separated into different fractions according to particle size and the relationship between germanium concentration and particle size was investigated. Germanium contents decreased as the particle size increased and, consequently, main attention was paid to flue dust smaller than 60  $\mu$  (0.12% Ge). During the ashing of coal a number of elements are volatilized and absorbed

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E112/E135

Properties of furnace flue dusts and their use for the recovery of germanium

from the gaseous phase by the flue dust particles. The sorption process was studied by determining the concentrations of the various elements in the original coal and the flue dust. Spectroscopic methods of analysis were used and results are tabulated. On the average, the flue dusts contained between 27 and 33% combustible materials. Their concentration decreased on extraction with 0,2 N-H<sub>2</sub>SO<sub>4</sub>, indicating that they did not consist entirely of carbon. Results for three types of flue dust are tabulated, showing the following: 1) loss of weight of flue dust on calcination; 2) loss of weight of flue dust on calcination, after extraction with H<sub>2</sub>SO<sub>4</sub>; and 3) loss of weight of flue dust on extraction with H<sub>2</sub>SO<sub>4</sub>. Results of spectrographic analyses of flue dusts, H<sub>2</sub>SO<sub>4</sub>-extracts and extraction residues are submitted, listing all elements occurring in the three different fractions in the following concentrations: 1) higher than 1%; 2) 1.0-0.1%; 3) 0.1-0.01%; and 4) lower than 0.01%. The following values are tabulated for germanium: original sample of flue dust, 1 - 0.1%;

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E112/E135

Properties of furnace flue dusts and their use for the recovery of germanium

H<sub>2</sub>SO<sub>4</sub>-extract, 1 - 0.1%; ashing residue of H<sub>2</sub>SO<sub>4</sub>-extract, 0.1 - 0.01%. Extraction methods for germanium from flue dusts, using water, acids, and alkalis, are described. Water extraction recovered about 50% of the available germanium. Extractability with H<sub>2</sub>SO<sub>4</sub> was inversely proportional to the concentration of the latter, (20 N-H<sub>2</sub>SO<sub>4</sub> extracted 64.5% Ge, while 0.05 N-H<sub>2</sub>SO<sub>4</sub> gave 96.7% recovery). On the other hand, extractability with HCl increases with increased concentration. Recovery of Ge by means of HNO<sub>3</sub> was not feasible. The separation of Ge by means of HCl from the coarser fly ashes is also described. An addition of HF (in the form of CaF<sub>2</sub>) is recommended to convert the SiO<sub>2</sub> to SiF<sub>4</sub>, which is driven off by heating. Extraction with weakly alkaline solutions was somewhat inferior to processing with dilute acids. In order to obtain additional information about the isolation of germanium from flue dusts, the volatility of germanium dioxide at different temperatures was studied and results are tabulated. It was found that up to 400 °C germanium was not volatile and was

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Properties of furnace flue dusts .... Z/009/61/000/007/001/004  
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assumed to be present as  $\text{GeO}_2$ , easily soluble in alkalies. On the other hand, samples of flue dust, heated under identical conditions, showed poor extractability of Ge by means of dilute sulfuric acid. This is explained by the poor solubility of  $\text{GeO}_2$  in  $\text{H}_2\text{SO}_4$ . It is concluded from laboratory experiments that flue dusts containing 0.3-1.0% Ge present a suitable raw-material for a Czechoslovak germanium recovery industry. Extraction with dilute sulfuric acid or treatment with HCl and distillation as  $\text{GeCl}_4$ , optionally in a stream of HCl, are suggested. The described laboratory methods were utilized for industrial scale production, details of which are to be published later.

There are 7 figures, 12 tables and 12 references: 3 Czech, 7 English and 2 German.

ASSOCIATION: Ústav nerostných surovin, Praha  
(Institute for Mineral Raw-Materials, Prague)

SUBMITTED: January 16, 1961

Card 4/4

COUNTRY : Czechoslovakia H-22  
CATEGORY :  
ABS. JOUR. : *IZKhim.*, No. 1959, No. 87897  
AUTHOR : Zahradnik, L.; Stovik, M.; Tyroler, J.  
INST. :  
TITLE : Distribution of Germanium in Products of the  
Combustion of Coal in Fire Boxes with Moving  
Grate  
ORIG. PUB. : *Chem. prumysl.*, 1959, 9, No 2, 62-64

ABSTRACT : The authors have studied the feasibility of securing starting raw materials for Ge production, from products of direct combustion of coal. A material balance is presented for a boiler with conveyer grate, considered from the standpoint of Ge-distribution among individual products of combustion. More than 70% of Ge originally contained in the coal are distributed between volatilized ash and furnace cinders. Cinders, because of low Ge-content (concentration of about 10<sup>-3</sup>%) can not be processed. Flying ash containing from 0.3 to 0.5% Ge can provide excellent raw material for the production of this element.  
Authors' summary.

CARD:

TYROLER, J.; STOVIK, M.; ZAHRADNIK, L.

Distribution of germanium between the combustion products in a hearth having a traveling grate. p. 62

CHEMICKÉ PRŮMYSLI. (Ministerstvo chemického průmyslu) Praha, Czechoslovakia  
Vol. 9, No. 2, Jan. 1959  
*Fil*

Monthly List of East European Accessions, (EEAI) LC, Vol.8, No 7, July 1959  
Uncl.

TYROLER, J.

"Germanium in the products of direct coal combustion and its extractibility of hydrochloric acid."

CHEMICKY PRUMYSL, Praha, Czechoslovakia, Vol. 9, No. 3, March 1959.

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

Unclassified.

S/081/62/000/019/019/053  
B144/B180

AUTHORS: Stovik, Miroslav, Zahradnik, Lubomir, Tyroler, Jiří, Vondra-  
ková, Zdena, Formanek, Zdenek

TITLE: Production of concentrates of germanium and other trace ele-  
ments by burning coal in furnace grates

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 19, 1962, 340, abstract  
1982 (Czechoslovakian patent 99414, April 15, 1961)

TEXT: When coal is burned in furnaces, almost all the Ge is carried away  
with the finer fractions in the form of volatile compounds. For more com-  
plete removal it is suggested that the coal should be burnt in a reducing  
atmosphere. To this end the entry of primary air from below is restricted to  
a minimum and that of secondary air above the grate is increased. The amount  
of Ge compounds adsorbed in the thin fractions then rises to 80% the Ge con-  
tent of the coal. The combustion gases are led through a cyclone, where  
the largest particles are separated, and then through an electrostatic fil-  
ter and a second cyclone. Alternatively, after separating the large par-  
ticles, the gas is passed through a scrubber, (with either mineral or sili-  
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Production of concentrates ...

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cone oil), and then conducted through a hydrocyclone and a centrifuge, where the thin fraction is separated. The wash liquid is continuously recycled. Additions of 2-3% by weight sulfur (pyrite) to the coal promote the formation of volatile Ge compounds ( $GeS$ ,  $GeS_2$ ). Diagrams of the process are shown. [Abstracter's note: Complete translation.] ✓

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ZAIHRADNIK, Lubomir; FORMANEK, Zdenek; STOVIK, Miroslav; TYROLEP, Jiri;  
VONDRACKOVA, Zdena

Refinement of germanium dioxide. Chem prum 12 no.2:60-63 F '62.

1. Ustav nerostnych surovin, Praha.



Z/009/61/000/012/001/005  
E112/E953

AUTHORS: Zahradník, Lubomír, Formánek Zdeněk, Šťovík  
Miroslav, Tyroler Jiří and Vondráková Zdena

TITLE: Recovery of germanium dioxide from flue dusts

PERIODICAL: Chemický průmysl, no.12, 1961, 625-629

TEXT: The only domestic sources of germanium in Czecho-  
slovakia are the flue dusts from certain coals (germanium contents  
range from 0.2 to 0.8%) and the present paper discusses three  
possible methods of recovery via germanium dioxide: 1) Extraction  
with water or inorganic solvents, such as  $H_2SO_4$ ,  $HCl$ ,  $HNO_3$ ,  $NaOH$   
and  $(NH_4)_2S_x$ . Best results are achieved with 0.05 N- $H_2SO_4$ ,  
yielding up to 97% of the available germanium. Extraction  
efficiency is closely connected with the physical characteristics  
of the flue dusts, good recoveries being obtainable only with flue  
dusts of very fine particle size. Furthermore, only germanium  
available in soluble form will respond to the method. 2) Chlorin-  
ation of flue dusts. This process can be operated either at lower  
temperatures, in presence of steam, or at high temperatures, in  
presence of air. Compared to the distillation method with  $HCl$ ,  
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Recovery of germanium ...

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E112/E953

yields of germanium are inferior and the recovered products less pure. A further rectification is therefore necessary. The chlorination method, on the other hand, offers the advantage that even very low-content flue dusts can be processed. 3) Direct distillation with HCl. This method is considered the simplest from the technological point of view. It is only suitable for raw materials, containing germanium in a volatilisable form and is not economical for flue-dusts with low germanium content. The method consists of treating the flue dust with HCl, and procedures for the separation of the formed  $\text{GeCl}_4$  are described in detail. So far, this has been effected in two ways: a) Absorption of the gaseous mixture in water, containing 20% HCl. A recovery of 2-13 g germanium per 1 litre is feasible but this is considered unsatisfactory. b) Separation of germanium tetrachloride by condensation. However, considerable amounts of  $\text{GeCl}_4$  are entrained by HCl, and the method is, therefore, rejected as uneconomical. The authors now offer a new procedure for  $\text{GeCl}_4$  absorption, based on the use of non-polar solvents, of which carbon tetrachloride has proved the most suitable. The efficiency of a 0.2%  $\text{GeCl}_4$  solution in  $\text{CCl}_4$

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Z/009/61/000/012/001/005  
E112/E953

is given as 97-99.5% at 20°C. As practical processing would require large volumes of  $\text{CCl}_4$  (1500 kg/kg Ge) a two-step absorption process is suggested. A diagram of a laboratory arrangement for the continuous recovery of germanium tetrachloride by the carbon tetrachloride method is shown (Fig.6). The apparatus operates under slight vacuum and has a capacity of 30 kg flue dust per day. The solution of  $\text{GeCl}_4$  in  $\text{CCl}_4$  is preliminarily refined by extraction with concentrated hydrochloric acid, containing 10% nitric acid. Hydrolysis of  $\text{GeCl}_4$  is carried out in the usual way. The experience gained in laboratory trials led to the construction of a semi-technical batch-wise unit, which in two months produced 10 kg germanium dioxide from 1000 kg flue dust. There are 5 tables, 5 figures and 5 references: 2 Soviet-bloc and 3 non-Soviet bloc. The English-language references read as follows: Ref.1: Journal of Metals, 979(1953); Ref.2: Johnson O.H., Chemical Reviews, vol.51, 432 (1952); Ref.5: Aubrey K.V., Nature, vol.176, 2 (1955). ✓

ASSOCIATION: Ústav nerostných surovin, Praha  
(Institute for Mineral Raw Materials, Prague)

Card 3/54

Recovery of germanium ...

Z/009/61/000/012/001/005  
E112/E953

SUBMITTED: January 16, 1961

Fig.6. Legend.

- 1 - mixing vessel, with stirrer, for absorption of flue dust in hydrochloric acid,
- 3,4 - steam-heated boiling tubes,
- 5 - separator,
- 6 - condenser,
- 7 - absorption vessel,
- 8 - absorption column with Raschig rings,
- 10 - separating funnel with  $CCl_4$ ,
- 9 - condenser, cooled to  $0^\circ C$ ,
- 11 - reservoir, to which a slight vacuum is applied.

✓  
-

Card 4/54

TYROLEROVA, Pavla; VRBACKY, Ivan; HANYKYR, Vladimir

Effect of barium titanyl oxalate calcination on  $BaTiO_3$  properties.  
Silikaty 9 no.1:25-33 '65.

1. Chair of Silicate Technology of the Higher School of Chemical  
Technology, Prague. Submitted August 5, 1964.

PATON, B.Ye., akademik, doktor tekhn.nauk, laureat Leninskoy premii;  
VOLOSHKEVICH, G.Z., kand.tekhn.nauk, laureat Leninskoy premii;  
OSTROVSKAYA, S.A., kand.tekhn.nauk; DUDKO, D.A., kand.tekhn.nauk;  
POKHODNYA, I.K., kand.tekhn.nauk; STERENBOGEN, Yu.A., kand.tekhn.  
nauk; RUBLEVSKIY, I.N., inzh.; ZHEMCHUZHNIKOV, G.V., kand.tekhn.  
nauk; ROZENBERG, O.O., inzh.; SEVBO, P.I., kand.tekhn.nauk; NOVIKOV,  
I.V., inzh.; MEDOVAR, B.I., kand.tekhn.nauk; DIDKOVSKIY, V.P., inzh.;  
RABKIN, D.M., kand.tekhn.nauk; TYAGUN-BELOUS, G.S., inzh.; ZARUBA,  
I.I., kand.tekhn.nauk, retsenzent; GREBEL'NIK, P.G., kand.tekhn.nauk,  
red.; TYNYANYI, G.D., red.

[Electric slag welding] Elektroshlakovaya svarka. Izd.2., ispr. 1  
dop. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1959.  
409 p. (MIRA 13:4)

1. AN USSR (for Paton).  
(Electric welding)

TYROLER, K.

TYROLER, K. Experience with the technical maintenance of tractors according to motor fuel consumption.p. 415

Vol. 6, No. 21, Nov. 1956  
MERCHANISAGE ZEMEDLSTVI  
AGRICULTURE  
Praha, Czechoslovakia

So: East European Accessions, Vol. 6, No. 3, March 1957

TYROLEROVA, Pavla

A contribution to the analysis of germanium in coal. Sbor chem tech  
no.3, part 2:321-326 '59.

1. Katedra mineralogie, Vysoka skola chemicko-technologicka, Praha.



TYROLEROVA, Pavla

Chemistry of cenomanian glauconites. Sbor chem tech 4 no.1:353-362  
'60. (EEAI 10:9)

1. Katedra mineralogie, Vysoka skola chemicko-technologicka, Praha.  
(Glauconite)

TYROLEROVA, Pavla

Geochemistry of germanium in Rednice basin. Sbor chem tech no.3,  
part 2:353-363 '59.

1. Katedra mineralogie, Vysoke skola chemicko-technologicka, Praha.



**"APPROVED FOR RELEASE: 08/31/2001**

**CIA-RDP86-00513R001757720009-3**

**APPROVED FOR RELEASE: 08/31/2001**

**CIA-RDP86-00513R001757720009-3"**

TYROWICZ, L.

Rational trends in the creation of fashions. p.126.  
ODZIEZ (Centralne Zarzady Przemyslu Dziewiarskiego, Odziezowego i  
Ponczoszniczego) Lodz  
Vol. 6, no. 7, July 1955

So. East European Accessions List

Vol. 5, No. 1

Jan. 1956

TYROWICZ, Marian

Employment problems and changes in the economic planning  
system in the Czechoslovak Socialist Republic. Praca zabezp  
spol 7 no.4:28-29 Ap '65.

TYRONE, Marian

New principles for management and planning in the Czechoslovak Socialist Republic and their effect on the wages of employees. Praca zabezp spol 7 no.3:21-28 Mr 165.

LUCHOWSKI, Walerian; TYROWICZ, Marian

Damage problems for accidents and injuries suffered during work and for professional diseases. Praca zabezp spol 4 no.7:31-38 JI '62.



TYROWICZ, M.

"The Lower Carpathian Mountains and Slovakia in the Revolutionary Activities of J. M. Goslar, 1845-1846," P. 46,  
(WIERCHY, Vol. 22, 1953, Krakow, Poland.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3,  
No. 12, Dec. 1954, Uncl.

TYROWICZ, Marian

Agreement between Poland and Bulgaria on cooperation in the  
field of social policy. Praca zabezp spol 3 no.10:29-31 '61.

TYROWIECZ, TADEUSZ

Kamieniarstwo; obrobka maszynowa. (Wyd. 1)

Warszawa, Poland. Arkady. 1958. 219 p.

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

Uncl.

TYROWICZ, I.

Pinczow, lime blocks, a new building material, p. 18. (MATERIALY. BUDOWLANE, Warszawa, Vol. 10, no. 1, Jan. 1955.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 6, Jan. 1955, Uncl.

ZELVENSKIY, Ya.D.; KOLLEROV, D.K.; TYRSIN, A.A.; SHALYGIN, V.A.

Use of radioactive isotopes of sulfur to study the processes of  
the formation of corrosive substances in compressors and gas pipes.  
Gaz. prom. no.5:41-45 My '58. (MIRA 11:5)  
(Sulfur—Isotopes) (Corrosion and anticorrosives)

SOV/127-58-11-5/16

AUTHORS: Tyrstin, S.M. and Filippov, P.Ye., Mining Engineers

TITLE: Drainage Works at the Sokolovskoye Deposit (Osushitel'nyye raboty na Sokolovskom mestorozhdenii)

PERIODICAL: Gornyy zhurnal, 1959, Nr 11, pp 21 - 24 (USSR)

ABSTRACT: The Sokolovskoye deposit was to a large extent water logged, and had to be drained before stripping operations could be started. Special bore holes were drilled and pumps of the types ATN-14 and 12-AP were installed and operated in conjunction with special drainage ditches. In seven months the water level in the stripping layers was lowered by 23 m, and 1,220,000 cubic m of sand, which covered the deposit could be stripped. There is 1 table, 1 map and 2 Soviet references.

ASSOCIATION: Sokolovsko-SarbaySKIY gorno-obogatitel'nyy kombinat (Sokolovskoye - Sarbay Mining and Concentrating Kombinat)

Card 1/1

1. Mining engineering--USSR

TYRSIN, S.M., gornyy inzh; FILIPPOV, T.Ye., gornyy inzh.

Drainage operations at the Sokolovka ore deposit. Gor.khur.  
no.11:21-24 N '48. (MIRA 11:11)

1. Sokolovsko--Sarbayaskiy gorno-obogatitel'nyy kombinat.  
(Sokolovka (Kustanay Province)--Mine drainage)

CTRSPL Vol. 5-No. 1 Jan. 1952

Lysikov, A. P. (V.A. Obninsk Institute of Refrigeration, U.S.S.R. Academy of Sciences and  
M.V. Lomonosov Moscow State University). The roototropism of roots in nature. 1241-50

Akademiya Nauk, S.S.S R., Doklady Vol. 78, No. 6, 1957



TYRNIKOV, A.P.

Increase in length of tree roots along the northern limit of the forest  
region. Biol.MOIP Otd.biol. 59 no.1:71-82 Ja-F '54. (MLRA 7:5)  
(Roots (Botany)) (Russia, Northern--Trees) (Trees--Russia, Northern)

TYRTIKOV, A.P.

Growth of surface organs of trees along the northern timberline.  
Biol. MOIP. Otd. biol. 60 no.1:63-69 Ja-F '55. (MLRA 8:7)  
(Arctic regions--Trees)

TYRTIKOV, A.P.

Vegetation along the lower reaches of Yana River. Biol. MOIP. Otd.  
biol. 60 no. 5: 135-146 S-O '55. (MLRA 9:4)

(YANA VALLEY--BOTANY)

TYRTIKOV, A.P.

The activity of cambium in the roots and trunks of trees on the northern forest limit. Biul.MOIP. Otd.biol. 61 no.5:59-66 8-0  
'56. (MLRA 10:2)

(ARCTIC REGIONS--TREES) (CAMBIUM)

TYRTIKOV, A.P.

Development of vegetation as a factor of the formation and dynamics  
of rocks frozen over a period of many years. Probl. Sev. no.7:224-231  
'63. (MIRA 17:2)

TYRTIKOV, A.P.

Problems of improving the growing conditions of trees in northwestern  
Siberia. Probl. Sev. no.7:123-127 '63. (MIRA 17:2)

TYRTIKOV, A. P.

Effect of the exposition and some components of plant and soil coverings on the temperature conditions of soils at the northern taiga border. Pochvovedenie no.7:82-86 J1 62.  
(MIRA 15:10)

1. Institut merzlotovedeniya imeni V. A. Obrucheva.  
(Khantayka Valley—Soil temperature)

TYRTIKOV, A. P.

Development of the vegetation as a leading factor in the  
formation and dynamics of permanently frozen ground of the  
Yenisey Ridge. Trudy Inst. merzl. AN SSSR 19:55-64 '62.  
(MIRA 16:1)

(Yenisey Ridge—Vegetation)  
(Yenisey Ridge—Frozen ground)



TYRTIKOV, A. P.

Mounds surrounding tree trunks and ruptures of trunks. Trudy  
Inst. merz. AN SSSR 19:102-107 '62. (MIRA 16:1)

(Igarka region--Trees)  
(Dudinka region(Krasnoyarsk Territory)--Trees)

TYRTIKOV, A.P.

Use of vegetation as an indication of the composition and properties of seasonally thawed and seasonally frozen layers and the perennial permafrost stratum in the vicinity of Igar'ka. Izv. Sib. otd. AN SSSR no. 11:34-40 '60. (MIRA 14:1)

1. Igarskaya nauchno-issledovatel'skaya merzlotnaya stantsiya.  
(Igar'ka region—Frozen ground)  
(Plants, Effect of temperature on)

TYRTIKOV, A.P.

Effect of vegetation on permanently frozen subsoil. Mat.k oen.  
uch.o mers,zon.zem,kory no.3:85-108 '56. (MIRA 13:9)  
(Vegetation and climate) (Frozen ground)

COUNTRY : USSR  
CATEGORY : Soil Science. Physical and Chemical Properties of Soils. J

ABST. JOUR. : ZSRBiol., No. 23 1958, No. 104430

AUTHOR : Tyutikov, A. P.  
TITLE : Soil Temperature Cycle in Various Plant Associations in the Igarka Region

ORIG. PUB. : Pochrovedeniye, 1957, No. 6, 35-42

ABSTRACT : The results are presented of a study of the temperature cycle of soils at the surface and at a depth of 5, 10 and 15 cm beneath mosses and lichens, a thin spruce grove, a dense larch wood and under both thin and dense larch-Bryales associations. The lowest temperatures are recorded in coarsely mounded peat soils. The peaty horizon under the forest prevents heating of the soil and causes low soil temperature during the vegetative period. Improvement of tree growth may be attained by reinforcing the processes of mineralization of the peaty horizon. The use of herbicides intensifies the processes of mineralization and

Card: 1/2

COUNTRY :  
CATEGORY : J  
ABST. JOUR. : IZhNiel., No. 23 1958, No. 104430  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : increases the productivity of the tree stands. - V.A.  
Molodtsov

Card: 2/2

15-57-1-1064  
Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 1,  
p 170 (USSR)

AUTHOR: Tyrtikov, A. P.

TITLE: The Influence of Vegetation on the Subsoil in Perma-  
frost Condition Protracted (Many Years) (O vliyani  
rastitel'nosti na mnogoletnemerzlyuyu podpochvu)

PERIODICAL: Materialy k osnovam ucheniya o merzlykh zonakh zem.  
kory, Nr 3, Moscow, AN SSSR, 1956, pp 85-108

ABSTRACT: The influence of vegetation on temperature and on  
several other properties of protractedly frozen rock  
is distinguished by various trends and it changes not  
only with the kind of vegetation but also with the  
general climatic conditions of the region. Any plant  
cover slows warming of the soil in summer. Under a  
plant cover, the average monthly temperature of the  
soil at a depth of 15 cm to 40 cm is commonly 5° to

Card 1/3

15-57-1-1064

The Influence of Vegetation (Cont.)

15° lower, and the depth of thawing is 1.5 to 3 (and more) times less than in regions where vegetation is absent and the organic remains in the soil and on the soil are mineralized. This influence of vegetation is greater the larger the mass, the higher and denser it is, and the greater the content of plant remains in the soil and on its surface. Plant remains (litter, peat) commonly delay warming more effectively than a live plant cover. Any cover of vegetation slows the cooling of the soil in winter. Under a plant cover the average monthly temperature of the soil in winter is higher (sometimes as much as 17°) than in districts where the plant cover is absent and where the soil does not contain organic remains. Vegetation, hindering cooling of the soil in winter and warming in summer, leads to a lower (as much as 3°) or, under certain conditions, to a higher (as much as 2°) temperature in the upper layers of protractedly frozen formations. By decreasing the depth of thawing of the ground and by delaying erosion and removal of the soil, vegetation hinders the thawing of ice in protractedly frozen rocks.

Card 2/3

15-57-1-1064

The Influence of Vegetation (Cont.)

Elimination of the plant cover leads to thawing of the ice in such rocks, and this commonly results in the formation of lacustrine-paludal lowlands, gullies, slumps, sinks, and other thermokarst forms of relief. Plants, in the process of overgrowing lakes and land areas, commonly favor the formation of protractedly frozen rocks in districts where they have been absent. During this overgrowth of lakes and land areas, protractedly frozen rocks develop in zones of high organic content (at least in the upper layers) and are fundamentally different from rocks consisting chiefly of minerals especially in the large amount of ice.

A. M. Ch.

Card 3/3



TYRTIKOV, A.P.

Some data on the vegetation of the lower Indigirka Valley. Biol.  
MOIP. otd. biol. 63 no.1:71-77 Ja-F '58. (MIRA 11:5)  
(INDIGIRKA VALLEY--BOTANY)

TYRTIKOV, A.P.  
TYRTIKOV, A.P.

Soil temperature in various plant communities of Igarka District  
[with summary in English]. Pochvovedenie no.6:35-42 Je '57. (MLBA 10:9)

1. Institut merzlotovedeniya Akademii nauk SSSR.  
(Igarka District--Soil temperature)

TYRTYSHNAYA, V.

Pavlograd builders are content. Obshchestv.pit. no.2:28-29  
F '60. (MIRA 13:6)

1. Instruktor Pavlodarskogo oblastnogo soveta profsoyuzov.  
(Pavlograd--Restaurants, lunchrooms, etc.)

KASHITYSYN, G.Ye.; TYRTYSHNYI, P.I.

Selection and checking of the setting devices of overcurrent protection systems in supplying power to several large electric current receivers from a single transformer. Nauch. soob. Vost NII no.3:114-119 '63. (MIRA 17:5)

TYRTYSHNIKOV, G. M., comp.

Combatting automobile accidents; essential data Tashkent, Izd. NITO Avtodorozhnogo  
transporta USSR, 1936. 31 p. (53-48461)

Law

TYRTYY-OOL, Yu., uchenik 10 klassa; LOPSANCHAP, O.Ch., chaban, Geroy  
Sotsialisticheskogo Truda; KYRGYS, S.B., chaban; YURTAYEV, I.S.;  
FEDOSEYENKO, N.A., kukuruzovod

We shall put into practice the resolutions of the January Plenum  
of the Central Committee of the CPSU. Uch.zap.Tuv.nauch.-  
issl.inst.iaz.lit.i ist. no.9:14-29 '61. (MIRA 15:5)

1. Turanskaya srednyaya shkola (for Tyrtyy-ool).
2. Kolkhoz "30 let  
Oktyabrya", Dzun-Khemchikskogo rayona (for Lopsanchap).
3. Kholkhoz  
"Torgalyg" Ovyurskogo rayona (for Krygys).
4. Direktor sovkhoza  
"Krasnyy partizan" (for Yurtayev).  
(Tuva A.S.S.R.—Agriculture)

TYRUSNKOV, N. G.

"Determination of the Lower Limit of Industrial Content of Metal  
in an Ore," Razvedka i Okhrana Nedr, No. 5, pp 14-17, 1954

SO: W-31429, 2 Sep 55

TYRUIIN, V.F., inzh.

Scientific conference dedicated to the 90th anniversary of E.O.  
Paton's birth. Svar.proizv. no.6:45-46 Je '60. (MIRA 13:7)  
(Paton, Evgenii Oskarovich, 1870-1953)  
(Electric welding)



L 10913-67 EWT(1)/FCG GW/GD  
ACC NR: AY6021011 (A,N)

SOURCE CODE: UR/0000/65/000/000/0018/0033

31

AUTHOR: Adam, N. V.; Ben'kova, N. P.; Orlov, V. P.; Tyrumina, L. O.

ORG: none

TITLE: Secular variations of the geomagnetic field based on data of a spherical analysis

SOURCE: AN SSSR. Institut fiziki Zemli. Nastoyashcheye i proshloye magnitnogo polya Zemli (The present and past of the earth's magnetic field). Moscow, Izd-vo Nauka, 1965, 18-33

TOPIC TAGS: earth magnetism, geomagnetic measurement, spherical analysis, secular variation

ABSTRACT: This article concerns the principal geomagnetic field studied by the method of spherical analysis and its secular variations. The authors derive an analytical expression which approximates secular variations. They examine on the basis of this analytical expression certain problems of the nature of secular variations, and attempt to use the results obtained for forecasting the field. The authors, having previously used spherical analysis for plotting charts of isoporic lines in the polar caps and having obtained sufficiently good agreement with charts plotted from observational data, conclude that the sum of the first six terms of a spherical harmonic series permits representing the morphology of secular variations with the same degree

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ACC NR: AT6021011

of schematization. This scheme is characteristic of modern world isoporic charts plotted graphically from the data of magnetic observatories but without the element of subjectivism inherent to the graphic method. Spherical analysis is recommended both as a method of analytical representation and as a method of plotting isoporic charts. Since one of the important characteristics of the planetary part of secular variations is western drift, the authors estimated western drift for individual harmonics by means of spherical analysis of a constant field and secular variations, and by the shift of the centers of world anomalies. They also examined the latitudinal and longitudinal distributions of drift velocity. The velocity values obtained from the coefficients of spherical analysis of world charts of the total field for the 1955 epoch, and from the secular variation charts for the period 1954—1959, are calculated. The velocity values were found to fluctuate within  $-0.47$  to  $+0.12$  deg/year, two characteristics being noted: 1) a decrease of the velocity for high-latitude observatories and 2) asymmetry in the distribution of velocity between western and eastern hemispheres. The velocity values were higher for western observatories than for eastern. To extrapolate secular variations to the present or forthcoming epochs, isoporic charts of 1954—1959 were used to forecast the secular variations for 1960—1965. A comparison of the coefficients of the spherical analysis of secular variations revealed that, with the present accuracy, the coefficients higher than the third order can be considered constant, and the coefficients of the first three orders change in time within a set interval, fluctuating about averages that are constant or almost constant in time. It is concluded that during a 50-year period the magnetic moment can decrease by  $0.5 \cdot 10^{25}$  CGS, and that the position of the geomagnetic pole will

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ACC NR: AT6021011

shift along the latitudinal circle from  $291^{\circ}46'$  to  $291^{\circ}52'$ . Combining paleomagnetic and analytical studies of the geomagnetic field can be quite fruitful, in particular in regions west and east of the centers of world anomalies. Orig. art. has: 3 formulas, 6 tables and 6 figures.

SUB CODE: 12,08/ SURM DATE: 21Sep65/ ORIG REF: 007/ OTH REF: 004

Card 3/3

VOLCHENKO, I.G.; SHVEYSKIY, Ya.G.; TYRYKIN, A.I.

Enclosure for thawing frozen loads. Koks 1 khim. no.5:16-18  
'56. (Thawing) (Waste heat) (Sugar beets) (MLRA 9:10)

TYRYSHKIN, I.V., gornyy inzh.; BAYANOV, G.I., gornyy inzh.

Dressing fluorite ores in heavy suspensions. Gor. zhur. no.2:  
75-76 F'62. (MIRA 17:2)

1. Sredneaziatskiy filial Gosudarstvennogo nauchno-issledovatel'skogo  
instituta tsvetnykh metallov, g. Almalyk (for Tyryshkin). 2. Plaviko-  
vo-shpatovyy kombinat, pos.Toy--Tyube (for Bayanov).

TYRYSHKIN, V. G.

FD-1123

USSR/Engineering - Gas Turbines

Card 1/1 Pub. 41-4/17

Author : Tyryshkin, V. G., Leningrad

Title : The problem of selecting a method for designing long blades of a turbine stage

Periodical : Izv. AN SSSR. Otd. tekhn. nauk 6, 37-46, June 1954

Abstract : Discusses theoretical aerodynamic methods for determining efficiency of turbine blading. Gives results of experimental investigation on single-stage gas turbine, testing four stages of different blading. Compares theoretical with experimental results. Sketch; graphs. Two references.

Institution :

Submitted : July 10, 1954

SKNAR', N.A., kandidat tekhnicheskikh nauk; TYRYSHKIN, V.G., kandidat  
tekhnicheskikh nauk

Estimation of the efficiency of a turbine stage with long blades  
using data derived from investigations of stationary cascades of  
profiles. [Trudy] TSKTI no.27:81-93 '54. (MIRA 8:12)  
(Gas turbines) (Gas flow)

TYRYSHKIN, V.G.

ZHUKOVSKIY, V.S., doktor tekhnicheskikh nauk, professor; ZHUKOVSKIY, M.I., kandidat tekhnicheskikh nauk; ZYSINA-MOLOZHEN, kandidat tekhnicheskikh nauk; MARKOV, B.M., kandidat tekhnicheskikh nauk; SKHAR', N.A., kandidat tekhnicheskikh nauk; TYRYSHKIN, V.G., kandidat tekhnicheskikh nauk

M.E. Deich's book "Technical gas dynamics." Reviewed by V.S. Zhukovskii and others. Teploenergetika 2 no.1:62-64 Ja '55.  
(MIRA 8:9)

(Turbines--Fluid dynamics) (Gas flow) (Deich, M.E.)



TYRYSHKIN, V.G., kandidat tekhnicheskikh nauk; IVASHCHENKO, M.M., inzhener.

Mobile gas-turbine power plants. Energomashinostroenie no.5:27-30 My  
'56. (Electric power plants) (Gas turbines) (MLRA 9:9)

TYRYSHEIN, V.G., kandidat tekhnicheskikh nauk; SHIRKOV, B.A., inzhener.

Effect of bandage and holding wire on the efficiency of a turbine stage with long blades. Teploenergetika 4 no.9:16-19 S '57.  
(MLRA 10:8)

1. Tsentral'nyy kotloturbinnyy institut.  
(Turbines)

TYRYSHKIN, V.G.

TABLE I BOOK REFERENCE SW/5319

Отечественные Турбинисты, Михаил Иванович Емелин, Анатолий Михайлович Зандорский, Мария Михайловна Зина-Молодина, Николай Александрович Шварц, and Терентий Георгиевич Штыблик

Автоматическое совершенствование работы оператора паровых турбин (автоматическое совершенствование работы оператора паровых турбин) (Automatic Improvement of Blading in Steam and Gas Turbines) Moscow, Gosenergetizdat, 1956. 360 p. Russian only inserted. 4,000 copies printed.

Книга: В.Б. Тюрешкин, Доктор технических наук, профессор; Ю.Б. Кувалдин, Доктор технических наук, профессор; С.М. Ка. 1: 0.6. Заключено.

Примечание: Эта книга предназначена для инженеров, работающих на турбинно-конструкционных заводах, конструкторов, проектировщиков, и может также использоваться в качестве учебного пособия для студентов высших учебных заведений, обучающихся по специальности "Техническое обслуживание турбин".

ОБЪЕМ: В книге описаны методы исследования для выявления, профилирования и измерения бланков турбин и газотурбинных двигателей. Методы для определения потенциала потока воздуха и для определения потерь энергии в процессе работы турбины описаны в главе 1. Также описаны методы для определения потерь энергии в процессе работы турбины. Также описаны методы для определения потерь энергии в процессе работы турбины. Также описаны методы для определения потерь энергии в процессе работы турбины.

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12-27-50

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S/024/60/000/03/026/028  
E194/E455

AUTHOR: None given

TITLE: The 13th All-Union Scientific Technical Session on Gas-Turbine Manufacture

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Energetika i avtomatika, 1960, Nr 3, pp 183 (USSR)

ABSTRACT: The 13th All-Union Scientific Technical Session on stationary and traction gas-turbines<sup>2</sup> was held in Moscow on the 25th and 26th November 1959. It was convened by the Gas-Turbine Commission of the Academy of Sciences of the USSR, together with the State Scientific Technical Commission of the Council of Ministers of the USSR. Reports were read about the testing and operation of gas turbines ranging from 300 to 12000 kW and on the design of a 50 MW gas turbine. The session was attended by about 400 representatives of Research Institutes, Turbine and Locomotive Works, Design Institutes, Technical Colleges, Councils of National Economy and other institutes. The following reports were read: "Some Results Achieved in the Development of Small Gas-Turbines" by S.Ya.Osherov of the Ekonomayser Factory. ✓

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