

29

CA
Determination of Pt in tanning materials. P. S.
Kopeliovich and A. Ya. Yelland. *Izvestia Nauk
Tsvetnoy Metal. Inst. Koshereniol Prom., Sbornik Rabot No
6, 137-42 (1934).* -Recept in quebracho and sulfized
exts., Pt is quite satisfactorily detd. with the Hg
electrode (C. A. 28, 6719). In detg. Pt with the Hg
electrode, the electrode should be carefully washed in
running water after platinization and palladization.
A. A. Boethlingk

ASME METALLURGICAL LITERATURE CLASSIFICATION

The possibility of the replacement of volumetric methods for the determination of iron in iron tan liquors by a colorimetric method. L. I. Veland. *Industri Tentral Nauch.-Issledovatel. Inst. Kozhevnoj Prom.* 1932, No 6/7, 34-5; *Chem. Zentral*, 1933, II, 648. - Correct results are obtained in the examin. of Fe tan liquors by titration with KMnO₄. Colorimetric detn. of Fe with NH₄SCN, however, is not satisfactory as the liquor must be dil. too far and other substances present interfere. W. A. M.

VEILKOVSKIY, A.S.; YUSHKIN, V.V.; KHUDYAKOV, O.F.; SAVVINA, Ya.D.

Concise data on some gas-condensate fields of the Soviet Union.
Trudy VNIIGAZ no.17:58-65 '62. (MIRA 15:12)
(Condensate oil wells)

VEILLARD-CYBULSKA, Henryka

Cooperation of the psychiatrist with the juvenile court
judge. Neurol. Neurochir. Psychiat. pol. 13 no. 5:701-705
'63.

USSR / Human and Animal Physiology. Nervous System.

T-10

Abs Jour : Ref Zhur - Biologiya, No 1, 1959, No. 3764
Author : Kassil', G. N.; Vein, A. M.; Kamenetskaya, B. I.
Inst : AS USSR
Title : State of Blood-Brain Barrier in Relation to Some Experimental Effects on the Organism
Orig Pub : Dokl. AN SSSR, 1957, 115, No 4, 833-836

Abstract : At various intervals after intraperitoneal administration to white rats of P³², its concentration was determined in the substance of different brain sectors with relation to the activity of the blood. The highest concentration of P³² one hour after administration was discovered in the hypothalamic region, after 3 hours, in the cerebral cortex. The brain contents of P³² increased considerably one hour after a dosaged trauma to the skull, as well as 3 hours after an experimentally induced

Card 1/2

VEINBAKH, R.

USSR/General Problems of Pathology - Allergy.

S-2

Abs Jour : Referat Zhur - Biologiya, No 16, 1957, 71341

Author : Zager, O., Badenskiy, G., Koteyeski, E., Veinbakh, R.

Inst :

Title : The Influence of Unilateral Removal of Brain Cortex on
the Sanarelli-Schwarzman Phenomenon.

Orig Pub : Zh. med. nauk Akad. RNR, 1954(1955), 3, 155-162

Abstract : The Sanarelli-Schwarzman Phenomenon (SSP) was produced in cats by the introduction of inactivated centrifugates at 60 deg. of streptococcal and pneumococcal cultures, and in dogs -with the filtrate of Proteus OX-19. Six months before the test, the animals were subject to unilateral decortication. In cats, the SSP developed weakly and was practically equal to the one in control animals. In the tested dogs the SSP was more intensive than in the controls. The reaction was much more intense and wide-spread on the skin part on the opposite side of decortication.

Card 1/2

- 10 -

USSR/General Problems of Pathology - Allergy.

S-2

Abs Jour : Referat Zhur - Biologiya, No 16, 1957, 71341

By repeating the intradermal filtrate injection in 21 days the SSP became more intense than after the first injection. Here the strong reaction was shown on the skin parts connected with the operated hemisphere of the brain. The difference between the action of anesthesia and decortication on SSP is explained by the fact, that in the unilateral decortication the subcortical centers, located in the operated hemisphere, are freed from the balance regulating influence of the cortex; as a result, the reactivity of the skin is heightened. In anesthesia, however, outside of the cortex, the subcortical centers are included, for the inhibition is spread to the lower parts of the brain.

Card 2/2

- 11 -

VEINBERGA, I.; Linde, E.; Rudzitis, G.

Chemical and microbiological composition of sapropel mud of Kaniers Lake.
Report I. p. 91.

LATVIAS PSR ZINATNU AKADEMIJA. VESTIS. RIGA, LATVIA. No. 7, 1959

Monthly List of East European Accessions. (EEAI) LC, Vol. 9, no. 2,
Feb. 1960 Unclassified.

VEINBERGA, T.; LINDE, E.

Composition of sapropel and microflora of Lake Babite in different seasons. Report 2. Vestis Latv ak no.6:105-110 '61.

1. Latvijas PSR Zinatnu akademija, Mikrobiologijas instituts.

(Babite, Lake—Sapropels)

LINDE, E.; VEINBERGA, T.

Dynamics of sapropel mud microflora of Lake Kaniers. II. Vestis Latv
ak no.8:91-96 '61.

1. Latvijas PSR Zinatnu akademija, Mikrobiologijas instituts.

LINDE, E. (Riga); VEINBERGA, T. (Riga); RUDZITIS, G. (Riga)

Short chemanalytic data and microbiologic characteristics of sapropel
mud in Babite Lake. Vestis Latv ak no. Jl:121-126 '60.
*(EEAI 10:9)

1. Latvijas PSR Zinatnu akademija, Mikrobiologijas instituts.

(Latvia--Sapropels) (Latvia--Mud)

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001859230004-9

VEINER, P., candidat in stiinte economice; RABOACA, Gh.

On determination of the mechanization and automation level in industry.
Probleme econ 16 no.2:121-133 F '63.

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001859230004-9"

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001859230004-9

SISAKIAN, N.M.; VEINOVA, M.K.

The nature and the biological role of peptides and nucleotide
peptides. Analele biol 16 no.6:68-77 N-D '62.

**

APPROVED FOR RELEASE: 08/31/2001

COSCODAN, T.; VEINTRAUB, M.

CIA-RDP86-00513R001859230004-9"

Possibilities of cost price reduction in local construction
organizations. Probleme econ 18 no.3:25-38 Mr '65.

VENTRAUB, M.

Reserves of reduction of material consumption in constructions.
Problems econ 17 no.10:45-59 O '64.

"APPROVED FOR RELEASE: 08/31/2001

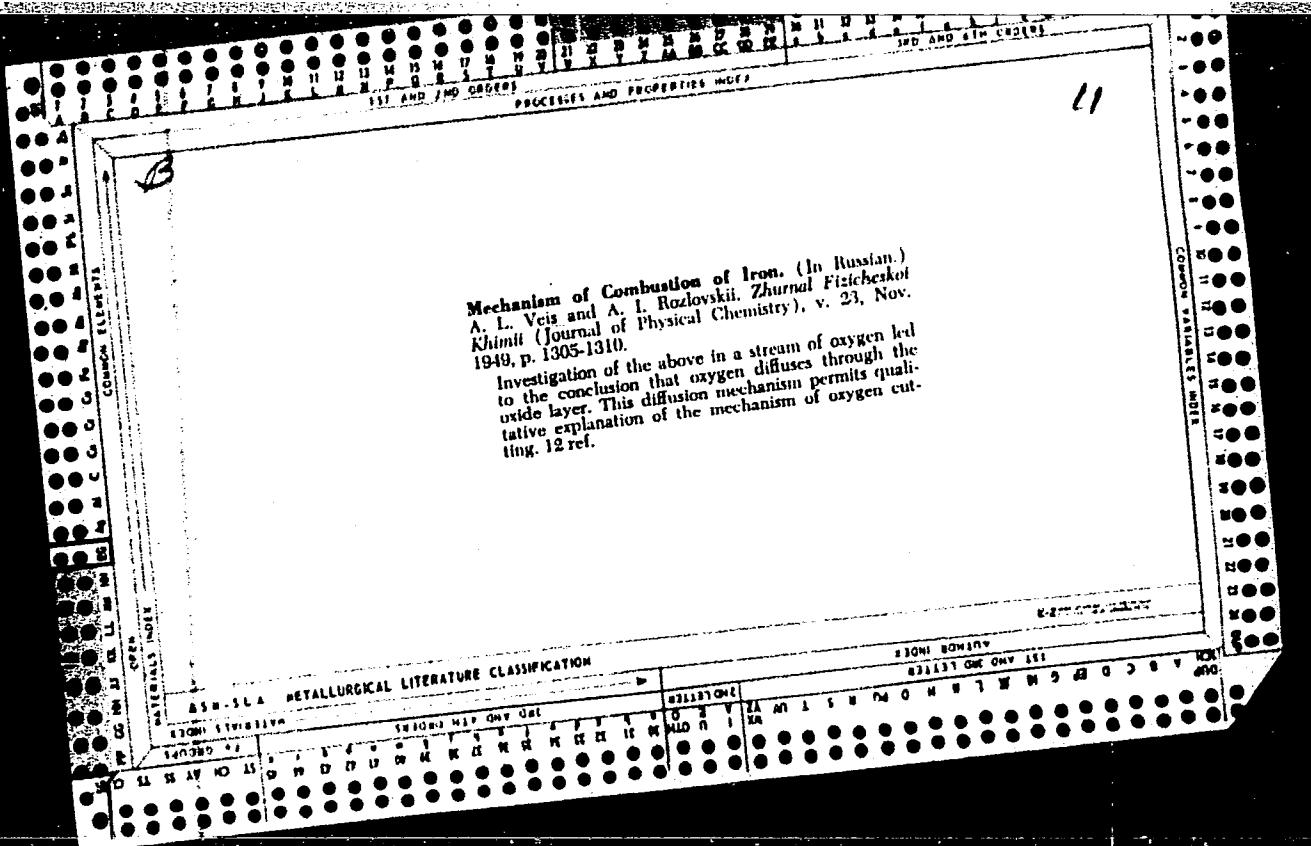
CIA-RDP86-00513R001859230004-9

VĚS.

Ideological education in medical schools. Cas. lek. česk. 92 no.18:479-481
1 May 1953. (CIML 24:5)

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001859230004-9"



ABRAHAMOVIC, M.; BIAHA, R.; NAUS, A.; PIHRT, J.; STYBLOVA, V.; VEIS, J.

Studies on the state of health in a group of tractor operators. Pracovni
lek. 11 no.6:293-298 Aug 59.

1. Lekarska fakulta hygienicka.
(OCCUPATIONS AND PROFESSIONS)

NAUS, Antonin; VEIS, Jaroslav

On the problem of teaching work hygiene, physiology and safety in
technical schools. Prac. lek. 14 no.3:115-117 Ap '62.

1. LFH KU v Praze. oddeleni prevence chorob z povolani, prednosta
dr. Antonin Naus.
(VOCATIONAL EDUCATION)

VEIS, K.

Do you brake in time and with good sense? Siln doprava 11
no. 6:21-22 Je '63.

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001859230004-9

VEIS, Karel

Car deformation in case of collision. Siln doprava 11
no. 10:24-25 S '63.

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001859230004-9"

VEIS, Karel

Highway transportation at the New York World Fair. Siln doprava
13 no.1:22 Ja '65.

VEIS, K.

How to accelerate the running-in of piston engines. Siln
doprava 12 no.11;20-21 N '64.

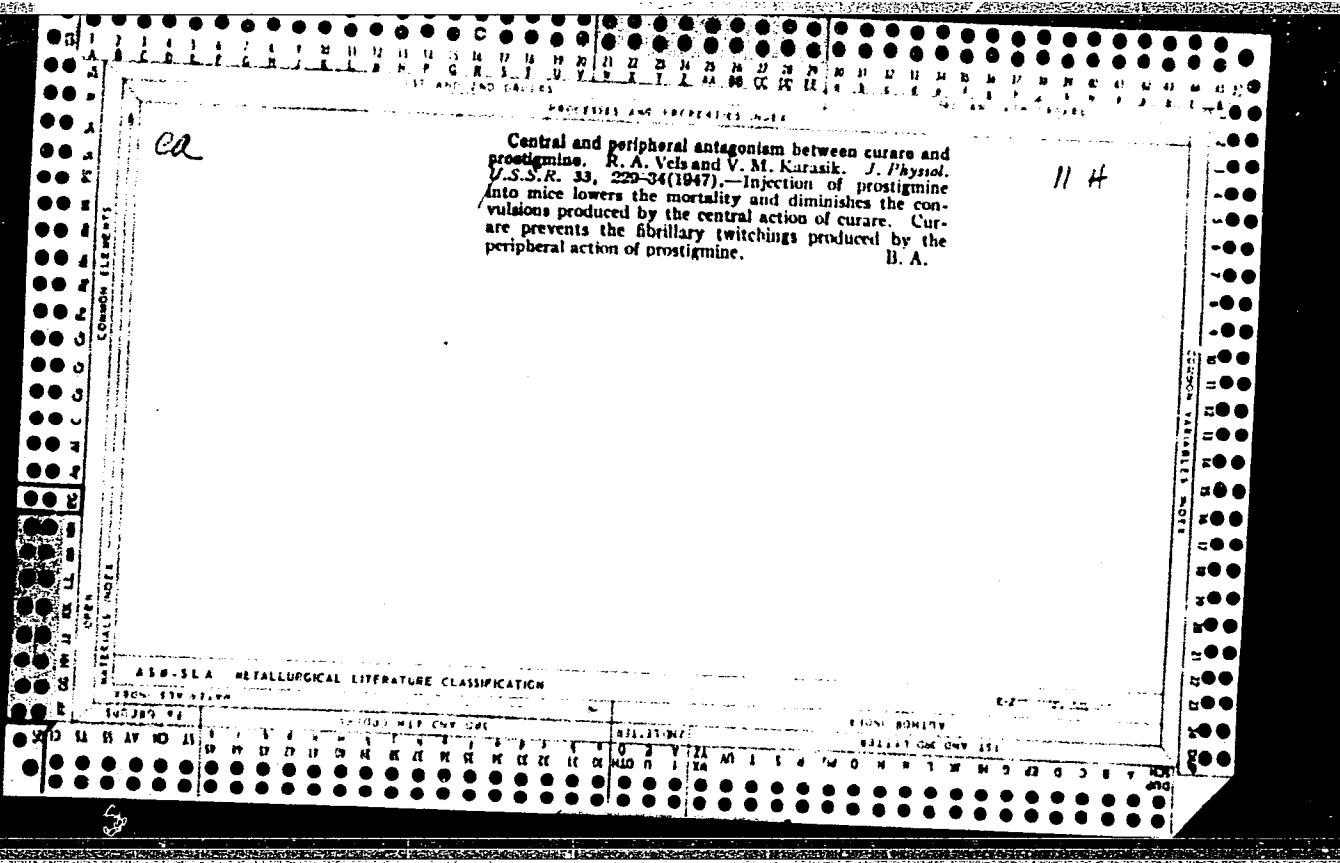
VEIS, Karel

Is your car provided with antinoise devices? Siln doprava
11 no. 8:13 Ag '63.

1. Stredisko pro rozvoj silnic a dálnic.

FOKS,A.D.; MILLER,S.Ye.; VELIS,M.T.; LOMIZH,L.G.[translator]; MIRIMANOV,
Ruben Gayevich, redaktor; KHTUKOV,I.A., redaktor; KORUZEV,N.N.,
tekhnicheskiy redaktor

[Behavior and application of ferrites in the microwave region.
Translated from the English] Svoistva ferritov i ikh primenie
v diapazone SVCh. Perevod s angliiskogo L.G.Lomize. Moskva, Izd-
vo "Sovetskoe radio," 1956. 99 p. (MIRA 9:3)
(Ferromagnetism)



USSR / Pharmacology, Toxicology. Chemo-Therapeutic Preparations. V
Antibiotics.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 27916

Author : Storozhev, A. I.; Veis, R. A.; Eydel'shteyn, S. I.;
Bykova, M. A.; Terezina, Ye. K.

Inst : Not given

Title : The Influence of Streptomycin With an Admixture of
Molybdenum on the Animal Organism

Orig Pub : Farmakol. i toksikologiya, 1958, 21, No 1, 67-71

Abstract : Prolonged subcutaneous introduction to white mice and
rats of a solution of molybdenum phosphate (I) in a dose
of 0.2-4 gamma as well as in the form of admixture to
streptomycin does not induce any negative influence on the
growth and development of young animals. Multiple in-
jections of 16-30 gamma of I and its mixture with strepto-
mycin do not induce an influence on the function of kidneys
and diuresis. Prolonged introduction to rabbits of

Card 1/2

17

USSR / Pharmacology, Toxicology. Chemo-Therapeutic Preparations. V
Antibiotics.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, №. 27916

streptomycin hydrochloride (50,000 units/kg each, with a total content in it of 80-90 gamma of I) leads to a certain increase of segmentonuclear neutrophiles at the time when their maximum quantity remains within the limits of normal. It is necessary to consider that in streptomycin there should be contained not more than 0.08% of I. -- From the authors' resume

Card 2/2

VEIS, R.A.; EYDEL'SHTEYN, S.I.

Review of the journal "Antibiotiki." Zhur.mikrobiol.epid. i imun
30 no.1:120-122 Ja '58. (MIRA 12:3)
(ANTIBIOTICS--PERIODICALS)

VEIS, S.

"A semiconductor resistance gauge with increased sensitivity."

p. 77(Acta, Vol. 2, no. 3, 1957, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, no. 9,
September 1958

CZECHOSLOVAKIA/Electronics. - Electrical Discharges in Gases and H
Gas Discharge Apparatus.

Abs Jour : Ref Zhur Fizika, No 11, 1959, 25511

Author : Veis, Stefan

Inst : Katedra Fyziki Prirodovedeckei fakulty UKv. Bratislave,
Bratislava

Title : Equilibrium Concentrations in the Case of Multiple
Thermal Ionization of a Gas

Orig Pub : Mat.-fys. casop., 1958, 8, No 1, 40-51

Abstract : The exact Saha equation is given for equilibrium concen-
trations of ions in the case of multiple thermal ioniza-
tion of gas. For increased pressures and temperatures,
the Saha equation cannot be applied and in order to satis-
fy it it is necessary to take into account the interaction
of the ions. This interaction can be represented by

Card 1/3

- 83 -

CZECHOSLOVAKIA/Electronics - Electrical Discharges in Gases and H
Gas Discharge Apparatus.

- Abs Jour : Ref Zhur Fizika, No 11, 1959, 25511

where c, c_{n-1}, c_n are the equilibrium concentrations of the electrons and the atoms of $(n-1)$ -fold and n -fold ionization, respectively, p is the pressure, $K_p(n)(T)$ is the equilibrium constant, e the electron charge, k Boltzmann's constant, and α is a constant equal to approximately 10^{-8} , T is the temperature, Z_{n-1} and Z_n are integers determined by the relation $e_1 = Z_1 e$ (e is the charge of the 1-fold ionized atom).
Bibliography, 9 titles.

Card 3/3

- 84 -

VEIS, S.

"Equilibrium concentrations at multiple thermal ionization of gas."

p. 40 (Matematicko-Fyzikalny Casopis, Vol. 8, no. 1, 1958,
Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, no. 9,
September 1958

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001859230004-9

VEIS, S.

"Technical and scientific transactions of the Osram Company."
Reviewed by S.Veis. El tech cas 15 no.8:510-511 '64.

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001859230004-9"

35186
Z/037/60/000/005/039/056
E192/E382

123/8
AUTHOR: Veis, Štefan

TITLE: Measurement of Pressure of Various Gases by a
Pirani Gauge Fitted with a Semiconducting Element

PERIODICAL: Československý časopis pro fysiku, 1960,
No. 5, pp. 448 - 455

TEXT: A Wheatstone bridge whose one arm contains a Pirani
gauge with a semiconducting element is considered (Fig. 1).
It is assumed that a high-impedance voltmeter is used as the
indicating device. The reading of the meter is expressed by:

$$= U \left(\frac{R_3}{R + R_3} - \frac{R_4}{R_1 + R_4} \right); \quad (1)$$

where R is the resistance of the semiconductor element of the
gauge,

R_2 , R_3 and R_4 are the resistances of the remaining
arms of the bridge (Fig. 1).

Card 1/2 X

Z/037/60/C00/005/039/056
E192/E382

Measurement of Pressure

The resistance of the semiconducting element is a function of temperature and can be expressed by:

$$R = R_a e^{B \left(\frac{1}{T} - \frac{1}{T_a} \right)} \quad (2)$$

where R_a is the resistance and

T_a is the temperature of the semiconducting element
at atmospheric pressure,

B in Eq. (2) is a constant for a given semiconducting
material,

T is the temperature of the element at a given pressure
 p in the gauge.

If it is assumed that the bridge is balanced at atmospheric
pressure, so that:

Card 2/7

Z/037/60/000/005/039/056
E192/E382

Measurement of Pressure

$$\frac{R_a}{R_3} = \frac{R_2}{R_4} = q \quad (5)$$

Eq. (1) can be written as:

$$U_{12}^q = \frac{qU}{1+q} \cdot \frac{1 - e^{B\left(\frac{1}{T} - \frac{1}{T_o}\right)}}{1 + q e^{B\left(\frac{1}{T} - \frac{1}{T_o}\right)}} \quad (6)$$

It is now necessary to find the relationship between the pressure p and the voltmeter reading U_{12}^q . It is assumed that the heat conducted by the gas per unit time from a unit area of the semiconductor element can be expressed by:

$$W = \frac{\gamma}{4} \frac{\kappa + 1}{\kappa - 1} \left(\frac{2R_o'}{\pi T_o M} \right)^{1/2} p(T - T_o') \quad (8)$$

Card 3/7

Z/037/60/000/005/039/056

E192/E382

Measurement of Pressure

(Ref. 5), where γ is the so-called accommodation coefficient, κ is the ratio of the specific heats, R'_o is the gas constant, M is the mass of a molecule, T is the temperature of the semiconducting element at pressures p and T_o is the ambient temperature. If the mean free path of the molecules in the gas is much shorter than the dimensions of the semiconducting element, the pressure as a function of voltmeter reading is given by:

$$p = \frac{C}{\gamma} \frac{x-1}{x+1} \sqrt{M} \left[1 - \frac{T_o}{B - T_o \ln \frac{R'_o}{R_a}} \ln \frac{U + (1+q) U_{f,s}^q}{U - \frac{1+q}{q} U_{f,s}^q} \right] \times \\ \times \left[\frac{T_o^2}{B - T_o \ln \frac{R'_o}{R_a}} \ln \frac{R_o[U + (1+q) U_{f,s}^q]}{R_o \left[U - \frac{1+q}{q} U_{f,s}^q \right]} \right]^{-1} \quad (15)$$

Card 4/7

X

Z/037/60/000/005/039/056
E192/E382

Measurement of Pressure

where C is a constant. As a given reading C of Eq. (15) for two different gases is the same but the pressures in the vacuum system for the two gases will be different. The ratio of the pressures is expressed by:

$$\frac{p_2}{p_1} = \frac{\gamma_1^1}{\gamma_2} \cdot \frac{(x_1 - 1)(x_1 + 1)}{(x_2 - 1)(x_2 + 1)} \sqrt{\frac{M_2}{M_1}}, \quad (16)$$

where indices 1 characterise the first gas and the indices 2 relate to the second gas. The calibration curves for a Pirani gauge with a semiconductor element can be evaluated by means of Eq. (16), provided the accommodation coefficients are known. These coefficients were evaluated for He, Ne, Ar, Kr and Xe. The calibration curves were calculated and these are shown in Fig. 2 (see dotted curves). The figure also shows experimental results (solid curves). It is seen that at higher pressures the experimental and the calculated curves are not in agreement. Consequently, it is necessary to introduce a

Card 5/7

Z/037/60/000/005/039/056
E192/E382

Measurement of Pressure

correction factor in Eq. (16). A more accurate formula is therefore derived. It was found that this formula gave better agreement with the experiments.

There are 2 figures and 8 references: 1 Czech and 7 non-Czech.

ASSOCIATION: Katedra fyziky Prírodovedeckej fakulty
Univerzity Komenskeho, Bratislava
(Chair of Physics of the Natural Sciences
Faculty of Komenský University, Bratislava)

Card 6/7

X

CZECHOSLOVAKIA / Physical Chemistry. Liquids and
Amorphous Bodies. Gases.

B-6

Abs Jour: Ref Zhur-Khimiya, No 23, 1958, 76573.

Author : Veis, S.

Inst : Not given.

Title : Equilibrium Concentrations for the Case of
Multiple Thermal Ionization in Gases.

Orig Pub: Mat-Fys-Casop, 8, No 1, 40-51 (1958) (in Czech
with summaries in English and Russian).

Abstract: It is assumed that the interaction of ions at
high temperatures and pressures in gases can
be expressed in the form of a potential $\phi = ab - e_a e_b \sqrt{1 - \exp(-\alpha r)} / r$. At large r this potential
reduces to the Coulombic potential (L. Landau
and Ye. M. Lifshits, Statisticheskaya Fizika
[Statistical Physics], Moscow, 1951; N. N. Bog-
olyubov, Problemy Dinamicheskoy Teorii v Stat-

Card 1/2

CZECHOSLOVAKIA / Physical Chemistry. Liquids and
Amorphous Bodies. Gases.

B-6

Abs Jour: Ref Zhur-Khimiya, No 23, 1958, 76573.

Abstract: isticheskoy Fizike [Problems in Dynamic Theory
in Statistical Physics], GITTL, 1946). When
the above interaction is taken into account the
Sakh/TN: spelling uncertain] equation takes on
the form of equation (1)

$$\frac{c_{n-1}}{c_n c} = p k_p^{(n)}(T) \alpha b \left\{ -\frac{1}{2} (Z_{n-1}^2 - Z_n^2 + 1) \times \right. \\ \left. \times \frac{\alpha \alpha n}{k T} \left[1 - \left(1 + \frac{4e}{\alpha k T} \sqrt{\frac{2 \pi p}{Z_n}} (Z_{n-1}^2 + n-1) \right)^{-1/2} \right] \right\} \quad (1)$$

where c , c_{n-1} , c_n are the equilibrium concen-
trations of the electrons and of the (n-1)- and
n-fold ionized atoms, p is the pressure, $K_p^{(n)}$
is the equilibrium constant, e is the electronic
charge, $\alpha = \sim 10^{-8}$ is a constant, T is the tem-
perature, Z_{n-1} and Z_n are integers determined
by the ratio $e_i = Z_i e$, where e_i is the charge on
the i-fold ionized atom.

Card 2/2

31

83380

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26.1400

AUTHOR: Veis, Štefan

Z/037/60/000/005/011/056

E192/E382

TITLE: Extending the Saha Equation to the Case When the
Interaction Between the Ions is Expressed by "Distant"
ForcesPERIODICAL: Československý časopis pro fysiku, 1960,
No. 5, pp. 398 - 403TEXT: The physical quantities which characterise thermally-
ionised gas are described by the Saha equation:

$$\frac{c_{n-1}}{c_n c} = p K_p^{(n)}(T), \quad n = 1, 2, 3, \dots; \quad (1)$$

where c_0, c_1, c_2, \dots are equivalent concentrations of neutral atoms, singly, doubly and triply ionised atoms, c is the equilibrium concentration of the electrons, p is the pressure and $K_p^{(n)}(T)$ is the equilibrium constant expressed by:

Card 1/4

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83380

Z/037/60/000/005/011/056
E192/E382

Extending the Saha Equation to the Case When the Interaction
Between the Ions is Expressed by "Distant" Forces

$$K_p^{(n)}(T) = \frac{g_{n-1}}{2g_n} \left(\frac{2\pi}{m} \right)^{3/2} \frac{h^3}{(kT)^{5/2}} e^{-I_n/kT} \quad (2)$$

where g_{n-1} , g_n are statistical weights,
 n is the mass of an electron,
 h is the Planck constant,
 k is the Boltzmann constant,
 T is the temperature and
 $I_n = \epsilon_{On} - \epsilon_{On-1}$ is the energy of the n -th ionisation
of an atom.

Eq. (1) does not take into account the interaction between the ions. This deficiency of the equation was rectified by B.L. Timan (Refs. 2-4), who assumed that the interaction is due to Coulomb forces. The expression derived by Timan is in the form of Eq. (3). However, this equation is inadequate when

Card 2/4

83380

Z/037/60/000/005/011/056

Extending the Saha Equation to the Case When the Interaction
Between the Ions is Expressed by "Distant" Forces

E192/E382

it is necessary to consider high pressures and temperatures. The Saha equation can be further generalised by considering the so-called "distant" forces whose potential can be expressed by Eqs. (5). For the purpose of deriving a generalised equation, it is possible to employ the binary distribution function derived by Bazarov (Ref. 8). The final formula is now in the form of Eq. (28). For a singly- or doubly-ionised gas this can be written as Eq. (29). This is equivalent to the Timan generalisation of the Saha equation. When the number of doubly ionised atoms is small in comparison with the singly-ionised particles, it is possible to use Eq. (29) to express the rate of ionisation α_2 . This is defined by Eq. (31). The rate of ionisation α is plotted in Fig. 1 as a function of pressure p . Curve 1 in Fig. 1 shows α_2 as evaluated from the Saha equation; Curve 2 was calculated from the Timan equation, while Curve 6 shows α_2 as found from Eq. (29). The curves were calculated for

Card 3/4

4

83380

Z/037/60/000/005/011/056

E192/E382

Extending the Saha Equation to the Case When the Interaction
Between the Ions is Expressed by "Distant" Forces

the doubly-ionised oxygen atoms at the temperature of
20 000 ^oK.

There are 1 figure and 8 references: 2 German, 2 Czech and
4 Soviet.

ASSOCIATION: Katedra fyziky prirodovedeckej fakulty
Univerzity Komenského, Bratislava (Chair
of Physics of the Natural Science Faculty of
Komensky Bratislava) ✓

Card 4/4

26.2358

Z/037/60/000/005/039/056
E192/E382AUTHOR: Veis, ŠtefanTITLE: Measurement of Pressure of Various Gases by a
Pirani Gauge Fitted with a Semiconducting ElementPERIODICAL: Československý časopis pro fysiku, 1960,
No. 5, pp. 448 - 455TEXT: A Wheatstone bridge, whose one arm contains a Pirani gauge
with a semiconductor element, is considered (Fig. 1). It is
assumed that a high-impedance voltmeter is used as the indicating
device. The reading of the meter is expressed by:

$$U_{12} = U \left(\frac{R_3}{R + R_3} - \frac{R_4}{R_2 + R_4} \right) \quad (1)$$

where R is the resistance of the semiconductor element of the
gauge,

R_2 , R_3 and R_4 are the resistances of the remaining arms of
the bridge (Fig. 1).

Card 1/5

Z/037/60/000/005/039/056

E192/E382

Measurement of Pressures of Various Gases by a Pirani Gauge
Fitted with a Semiconducting Element

The resistance of the semiconducting element is a function of temperature and can be expressed by:

$$R = R_a e^{B \left(\frac{1}{T} - \frac{1}{T_a} \right)} \quad (2)$$

JC

where R_a is the resistance and

T_a is the temperature of the semiconducting element at atmospheric pressure,

B in Eq. (2) is a constant for a given semiconducting material,

T is the temperature of the element at a given pressure p in the gauge.

The resistance R can therefore be expressed by Eq. (4). If it is assumed that the bridge is balanced at atmospheric pressure,

Card 2/5

Z/037/60/000/005/039/056

E192/E382

Measurements of Pressures of Various Gases by a Pirani Gauge
Fitted with a Semiconducting Element

so that the condition given by Eq. (5) is fulfilled, Eq. (4)
can be written as Eq. (6). It is now necessary to find the
relationship between the pressure p and the voltmeter reading

U_{12}^q . It is assumed that the heat conducted by the gas per
unit time from a unit area of the semiconductor element can be
expressed by Eq. (8) (Ref. 5), where γ is the so-called
accommodation coefficient, κ is the ratio of the specific heats,
 R' is the gas constant, M is the mass of a molecule, T is
the temperature of the semiconducting element at pressures p
and T_0 is the ambient temperature. If the mean free path of
the molecules in the gas is much shorter than the dimensions of
the semiconducting element, the pressure as a function of
temperature is expressed by Eq. (9), where C is given by Eq. (10).
Consequently, the pressure as a function of the voltmeter reading
is given by Eq. (15). At a given reading C of Eq. (15) for
two different gases is the same but the pressures in the vacuum

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Card 3/5

Z/037/60/000/005/039/056

E192/E382

Measurements of Pressures of Various Gases by a Pirani Gauge
Fitted with a Semiconducting Element

system for the two gases will be different. The ratio of the pressures is expressed by:

$$\frac{P_2}{P_1} = \frac{\gamma_1}{\gamma_2} \cdot \frac{(\gamma_2 - 1)(\gamma_1 + 1)}{(\gamma_1 - 1)(\gamma_2 + 1)} \sqrt{\frac{M_2}{M_1}} \quad (16)$$

VC

where indices 1 characterise the first gas and the indices 2 relate to the second gas. The calibration curves for a Pirani gauge with a semiconductor element can be evaluated by means of Eq. (16), provided the accommodation coefficients are known. These coefficients were evaluated for He, Ne, Ar, Kr and Xe. The calibration curves were calculated and these are shown in Fig. 2 (see dotted curves). The figure also shows experimental results ('solid' curves). It is seen that at higher pressures the experimental and the calculated curves are not in agreement. Consequently, it is necessary to introduce a correction factor in Eq. (16). The more accurate formula has

Card 4/5

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E192/E382

Measurements of Pressures of Various Gases by a Pirani Gauge
Fitted with a Semiconducting Element

the form of Eq. (24). It was found that this equation gives better agreement with the experiments.

There are 2 figures and 8 references: 3 English, 2 German,
2 Soviet and 1 Czech.

ASSOCIATION: Katedra fyziky Prírodovedeckej fakulty
Univerzity Komenského, Bratislava
(Chair of Physics of the Natural Science
Faculty of Komenský University, Bratislava)

✓C

Card 5/5

Weis, Stefan

SURNAME, Given Names

Country: Czechoslovakia

Academic Degrees: Dr, Docent

Affiliation: Physics Chair, Faculty of Natural Sciences, Comenius University
(Fakulta Fyziky, Priradovedecka fakulta, Komenskeho univerzity),
Bratislava

Source: Bratislava, Nasa Veda, Vol VIII, No 6, 1961, pp 456-461.

Data: "Electrical Rocket Engines."

Equilibrium concentrations at multiple thermal ionization of a gas? Štefan Vida, Mat.-fyz. časopis 8, 40-51(1958).
An improved form of the Saha equation is introduced for the equil. concns. of ions at various degrees of thermal ionization of a gas. The original Saha equation does not provide for the effect of ion interaction and does not present the true picture of equil. concns. of ions at higher pressures. Ion interaction is expressed by means of potentials based on the equation: $\varphi_{ab} = e_a e_b (1 - e^{-\alpha r})/r$. This ion interaction potential at high values of r assumes the form of the Coulomb potential and for very small values of r allows for exchange and polarization interaction. The improved form of the Saha equation is: $c_{n-1}/c_n = \rho K_e^{(n)}(T) \exp \left[- \frac{1}{2} (Z_e^2 - Z_{e-1}^2 + 1) (\epsilon^2 \alpha / k T) [1 - (1 + (4\pi/\alpha k T)) \pi p / (Z_{e-1}^2 + (n-1)/n)^{1/2}] \right]$ where c_e , c_{e-1} and c_n are the equil. concns. of electrons and atoms with $(n-1)$ and n degree of ionization; p , the pressure; $K_e^{(n)}(T)$, the equil. const.; ϵ , the charge of an electron; k , the Boltzmann const. α a const. $\sim 10^8$ cm.⁻¹; T the temp.; Z_{e-1} and Z_e are whole nos. given by the relation $Z_i = Z_{1e}$, where Z_i is the charge of an atom with an i degree of ionization.

1. Ceresna

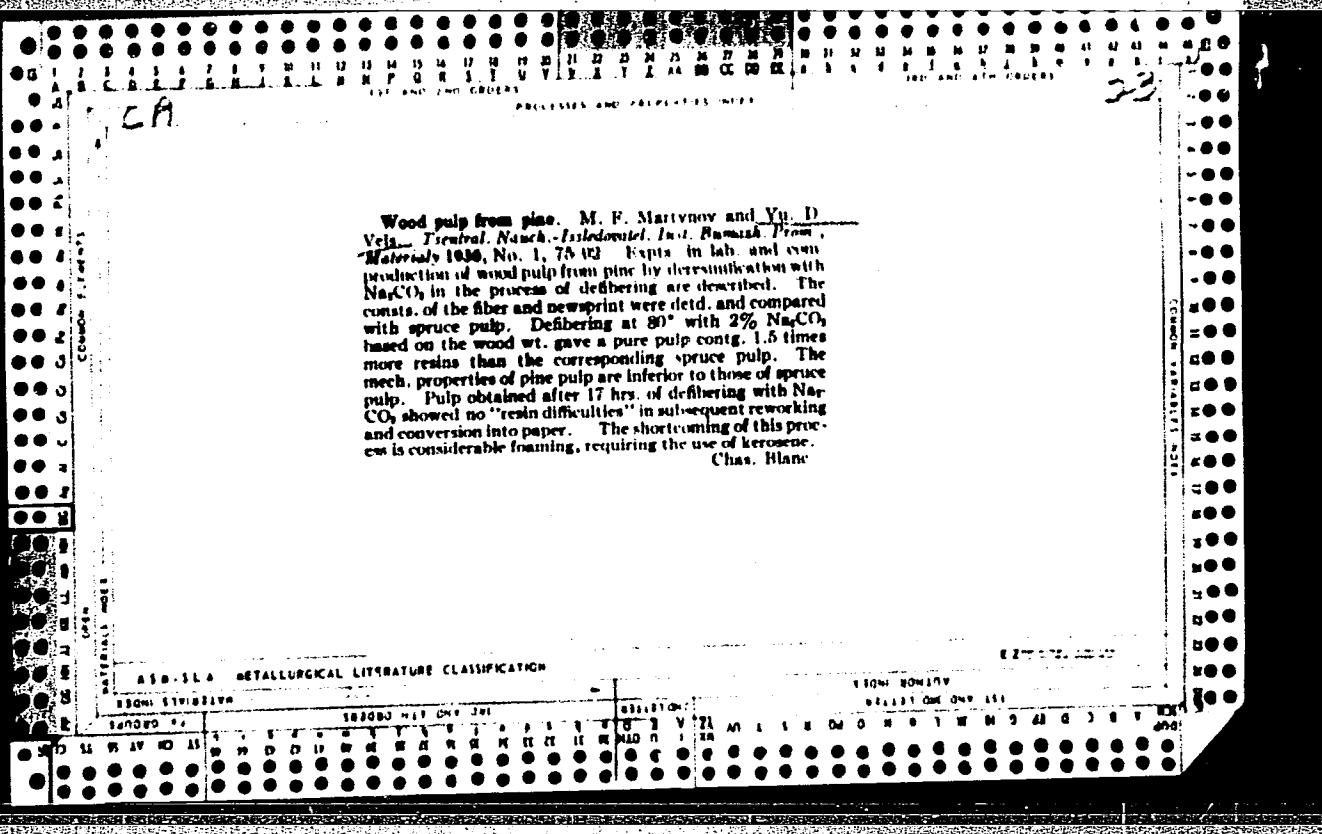
Distr: 4E3c/4E3d/4E4j

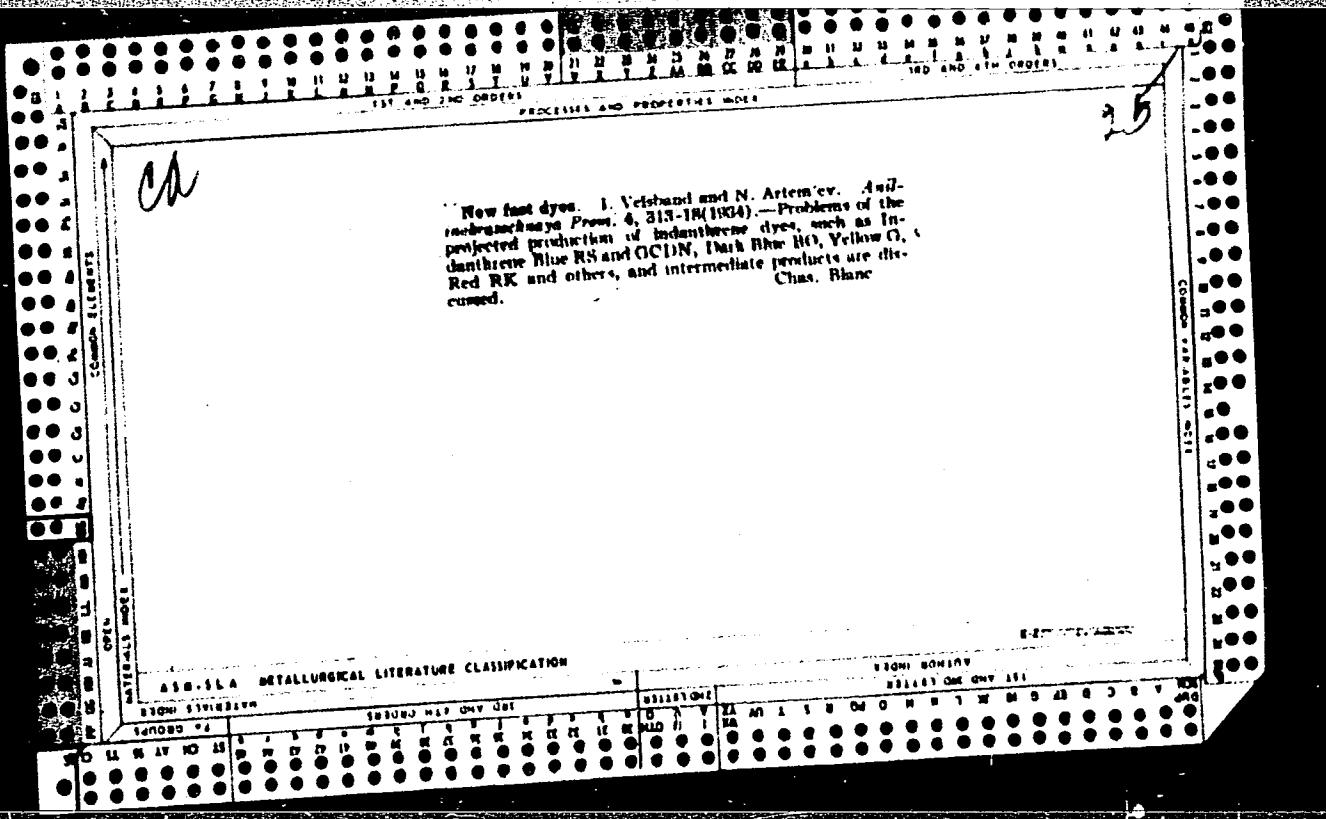
1. VEIS, Yu. A.
 2. USSR (600)
 4. Agriculture
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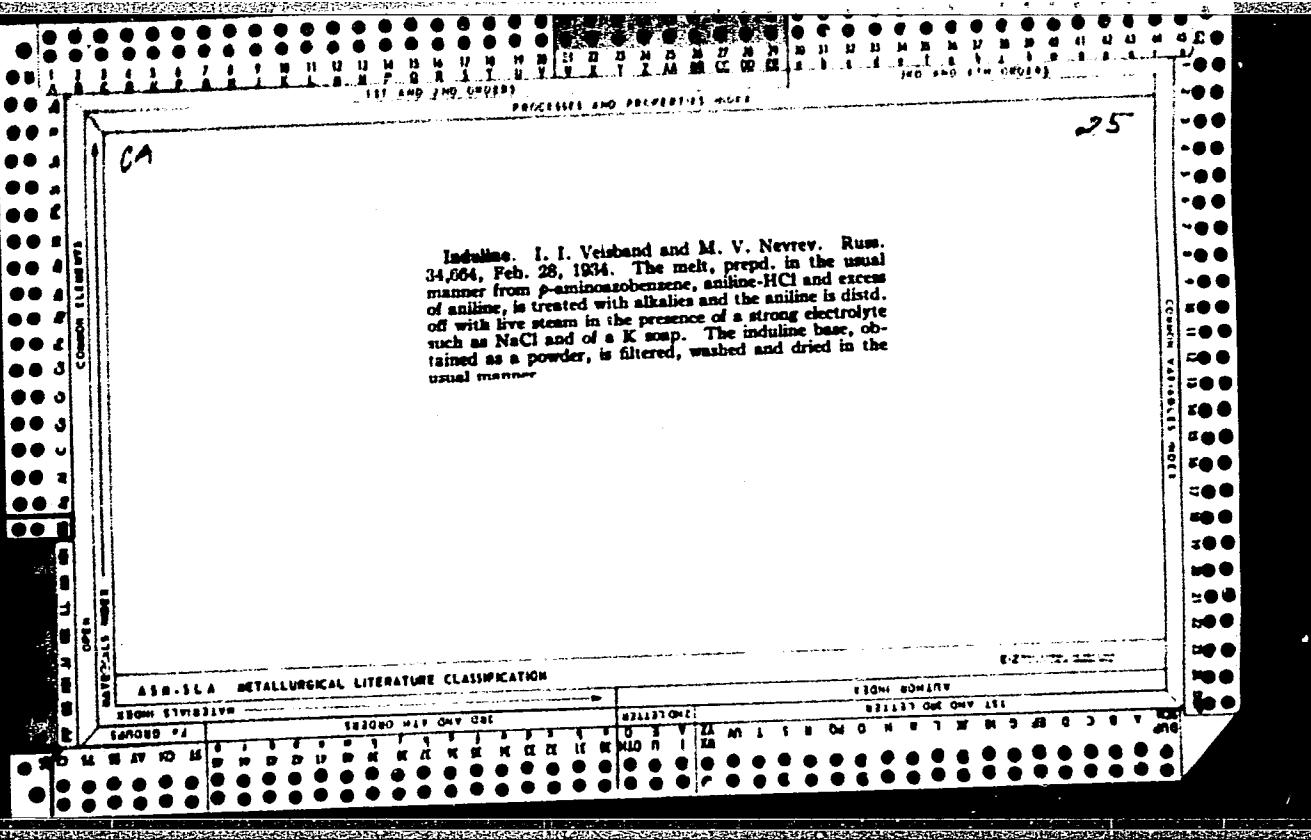
VFIS, Yu.D., red.; SMOLYAKOV, B.L., red.

[Advanced practices in the improvement of technique and technology in the woodpulp, hydrolysis, and wood chemicals industry] Peredovyj opyt sovershenstvovaniia tekhniki i tekhnologii v tselliulozno-bumazhnom, gidroliznom i leso-khimicheskem proizvodstve. Moskva, Goslesbumizdat, 1963.
81 p. (MIRA 17:5)

1. Nauchno-tehnicheskoye obshchestvo bumazhnoy i derevo-obrabatyvayushchey promyshlennosti. TSentral'noye pravleniye.







VEKSLER, V.J.; VODOPJANOV, A.F.; JEFREMOV, D.V.; MINC, A.Z.; VEISBEIN, M.M.; GASEV, M.G.; ZEJDLIK, A.J.; IVANOV, T.P.; KOLOMENSKIY, A.A.; KOMAR, E.G.; MALYSEV, J.E.; MONOSZON, M.A.; NEVJAZSKIJ, J.Ch.; PETUCHOV, V.A.; RABINOVIC, V.A.; RUBCINSKIY, S.N.; SINEZHNIKOV, K.D.; STOLOV, A.M.; KULT, Karel, inz.

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1. Ustav jaderné fysiky (for Kult).

WEISBERG, M.; Fakk, A.

Laboratory tests for determining the chlorine consumption in bleaching reed-sulfate pulp for papermaking, by means of adding black liquor to the pulping liquor. p. 286.

CELULOZA SI MIRTIE. (Asociatia Stiintifica a Inginerilor si Technicienilor din Romania si Ministerul Industriei Petrolului si Chimie) Bucuresti, Rumania. Vol. 8, no. 9, Sept. 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 9, no. 2, Feb. 1960.

Uncl.

ACCESSION NR: AP501720

AUTHOR: Weiser, I. (Engineer)

TITLE: Evaluation of the Medgidia clays for their possible use in the manufacturing
of refractory products

SOURCE: Metalurgia, no. 7, 1964, No. 7, 1964

TOPIC TAGS: clay, nonmetal plasticity, solid mechanical property, refractory
product

ABSTRACT: Analysis of the Medgidia clays shows them to be characterized by high
plasticity, low melting temperature and high vitrification temperature and
the possibility of using them in the manufacture of refractory materials

DITIONS SUGGEST THAT THIS IS THE
Orts. art. has: 3 figures, 4 tables.

(Central Research Institute)

L 31726-66 EWP(e) WH

ACC NR: AP6021197

SOURCE CODE: RU/0017/65/000/003/0418/0421

AUTHOR: Veiser, I. (Engineer)

19

B

ORG: Metallurgical Research Institute (Institutul de Cercetari Metalurgice)

TITLE: Studies aiming at the improvement of the quality of ladle bricks by using medgidia clays

SOURCE: Metalurgia, no. 8, 1965, 418-421

TOPIC TAGS: clay, refractory product

ABSTRACT: The author studied the use of Medgidia-Tugui clays in the industrial production of refractory materials to be used for ladle lining, refractory bricks, etc. Some data are presented on the technical-economic advantages provided by these clays. It is also pointed out that Gherghina clay is technically the equal of the Medgidia one but involves higher costs in its processing. Orig. art. has: 1 figure and 1 table. [JPRS]

SUB CODE: 11 / SUBM DATE: none / ORIG REF: 001 / OTH REF: 001

Card 1/100

UDC: 621.746.329.2.669.763.1

LIDAK, M. [Lidaks, M.] (Riga); LICIS, Ya. [Licis, J.] (Riga); VEISS, A.
(Riga)

Potentiometric determination of ethylenimine groups. Vestis Latv ak
no.2:lG1-106 '60. (EEAI 10:1)

1. Akademiya nauk Latviyskoy SSR, Institut organicheskogo sinteza.
(Potentiometer) (Ethylenimine)

LIDAK, M. [Lidaks, M.] (Riga); LICIS, Ya. [Licis, J.] (Riga); VEISS, A.
(Riga)

Potentiometric determination of ethylenimine groups. Vestis Latv ak
(EEAI 10:1)
no.2:101-106 '60.

1. Akademiya nauk Latviyskoy SSR, Institut organicheskogo sinteza.
(Potentiometer) (Ethylenimine)

VEISS, Milan, Potpukovnik dr.

~~Non-traumatic apoplectiform deafness. Voj. san. pregl., Beogr.~~
12 no.11-12:652-656 Nov-Dec 55.

1. Vojna bolnica u Zagrebu.
(MENIERE'S DISEASE,
non-traum. (Ser))

VEISS, I. A. and SUKHOTIN KAYA, M. A.

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001859230004-9"

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Sciences USSR, Vol. 22, Issue 1, pp 58-63, 1952.

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"d. Rokas gramata darzenu audzetajiem. Riga, Latvijas valsts izdevnieciba,
1957. 194 p. (Manual for vegetable growers)."

DA

Not in DLC

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

VEIT, J.

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Uses of Atomic Energy. p. 762. (POKROKY MATEMATIKY, FYSIKY A ASTRONOMIE,
Vol. 1, No. 5/6, 1956, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.

CZECHOSLOVAKIA/Radio Physics - Propagation of Radio Waves

I

Abs Jour : Ref Zhur Fizika, No 9, 1959, 20957

Author : Veit, Jan

Inst : -

Title : Application of Integral Equations for the Solution of
Maxwell's Equations.

Orig Pub : Slaboprodny. obzor, 1958, 19, No 12, 866-867

Abstract : An integral equation is obtained for the intensity of
the electric field as applied to the problems of the
fraction of electromagnetic waves. Mention is made of
the problem of the diffraction around a body located
over the earth.

Card 1/1

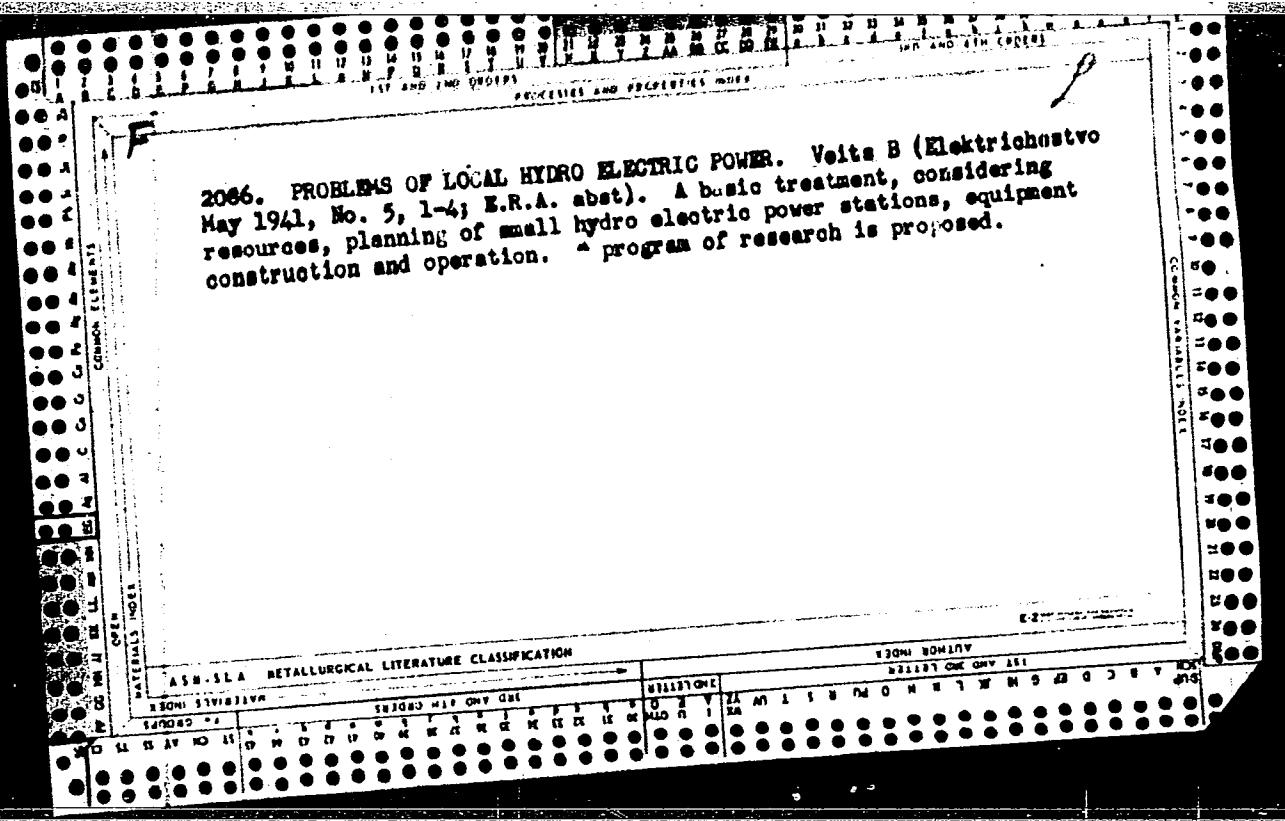
- 89 -

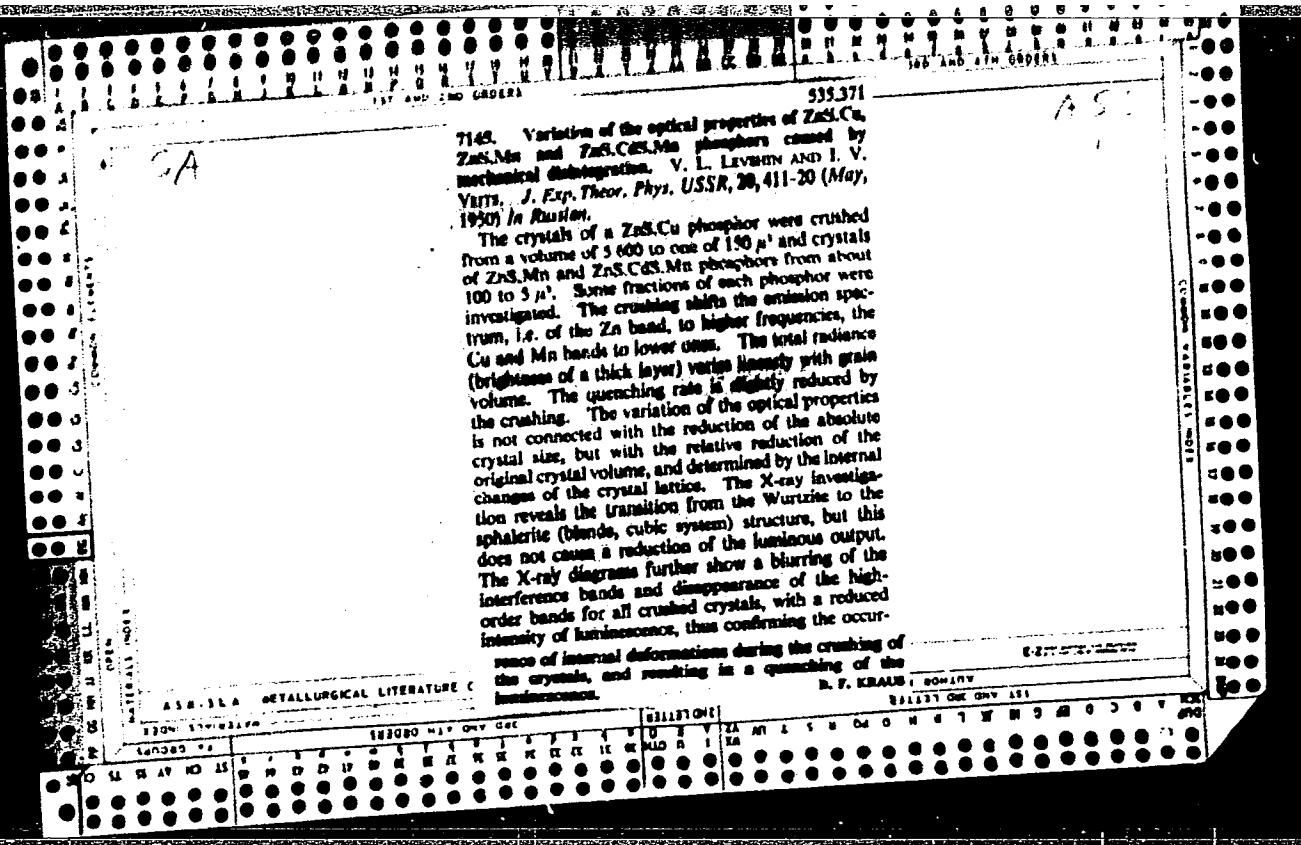
VEITKOV, FEDOR MECTOL'DEVICH

Kak skaz o tvortsakh telegraf. /The story about creators of the telegraph/.
Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1951. 107 p. 12188.
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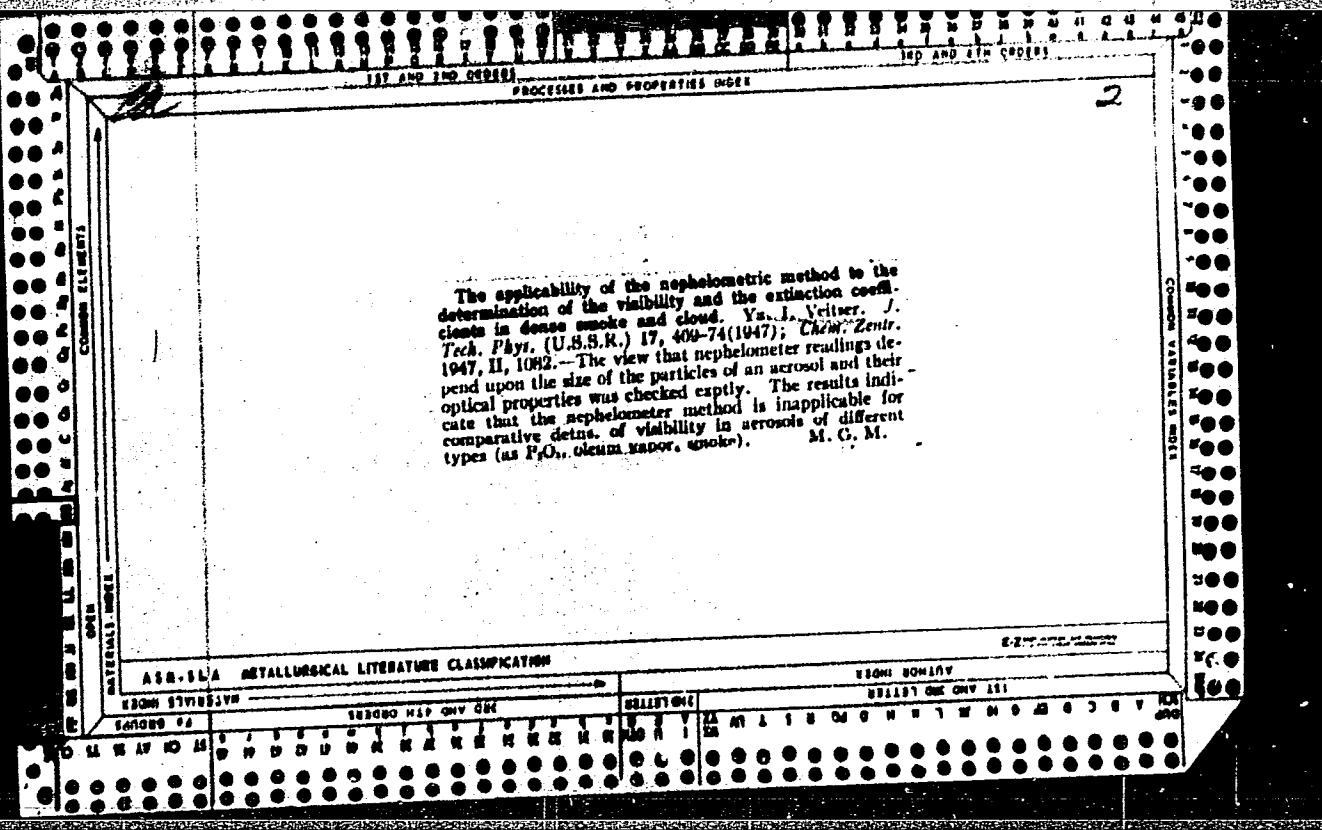


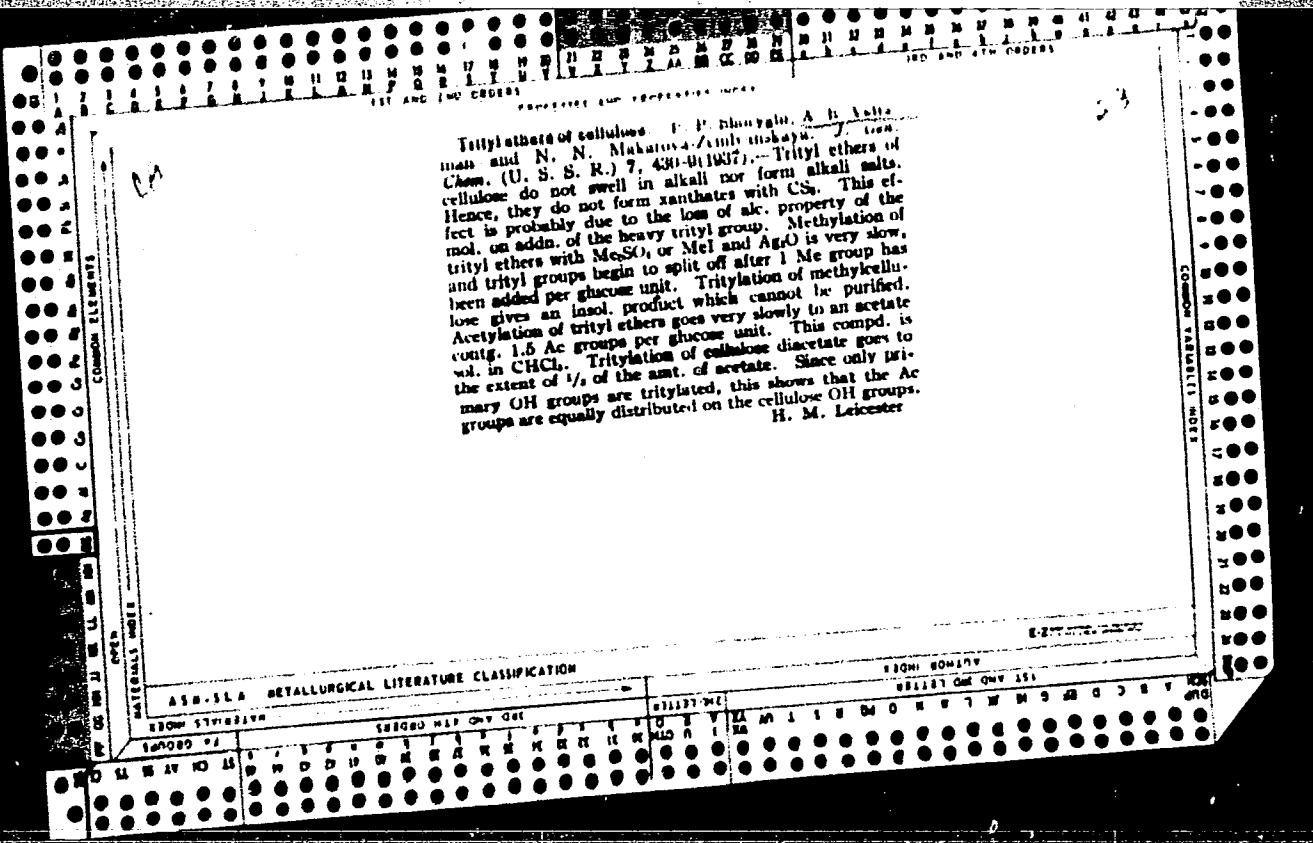


CH

Effect of mechanical comminution on the optical properties of ZnS-Cu, ZnS-Mn, and ZnS-CdS-Mn phosphors. V. L. Levskin and I. V. Velts (Phys. Inst., Moscow State Univ.), Zhur. Fizicheskaya Teorii Fiz., 20, 411-20 (1956). - The changes brought about by comminution from an original av. vol. of the crystals ($\sim 1 \text{ cm}^3/\text{g.}$) to a smaller av. vol. are illustrated by the following data: $\nu_0 - \nu$, ν/ν_0 , and the shift of the longer-wave (activator) and of the shorter-wave (Zn) emission bands (in me) caused by the comminution: ZnS-Cu, $3800 \rightarrow 3384$, 17, +8, and -10; ZnS-Mn, $87.5 \rightarrow 14.6$, 6, +10, and -8; ZnS-(80%)-CdS(20%), Mn, (10^{-3} g./g.) , 118 \rightarrow 22, 5.4, +8, and -15. The brightness of both bands decreases as a result of the comminution. With ZnS-Cu and ZnS-Mn this decrease is approx. the same for both bands; in ZnS-CdS-Mn, the intensity of the Zn band decreases more rapidly than in ZnS-Mn or ZnS-Cu, and incomparably more rapidly than the Mn band, which appears to be much more persistent in ZnS-CdS-Mn than in ZnS-Mn. It is noteworthy that the maxima of the 2 bands are shifted in opposite directions. In ZnS-Cu and ZnS-Mn, the total yield of luminescence decreases linearly with decreasing mean vol. v of the crystals, and the same linearity, with different slopes, applies to the intensity of the yellow (Mn) emission band of ZnS(85%), CdS(15%)-Mn(10^{-3} g./g.) and of ZnS(80%)-CdS(20%)-Mn(10^{-3} g./g.). The steep fall of the brightness on comminution is conceivable only as a result of deep lattice distortions produced in the process of grinding. With ZnS-Cu,

almost complete extinction of the luminescence was produced by comminution to grain size still higher than the original grain size of the strongly luminescent ZnS-Mn and ZnS-CdS-Mn phosphors. The form of the decay law of the luminescence, $I = A t^{-\alpha}$, remains unaffected by the comminution. The exponent α either remains unchanged or, at most, decreases slightly with decreasing v . Thus, for ZnS-Cu, $v = 5400$, 3384, 212 $\text{cm}^3/\text{g.}$, $\alpha = 0.90$, $\alpha = 1.24$, 1.24, 1.00, 0.81; ZnS(80%)-CdS(20%)-Mn, (10^{-3} g./g.) , $v = 118$, 72, 64, 40, $\alpha = 1.11$, 1.04, 1.04, 0.97. The fact that comminution, if anything, results only in a slowing-down of the decay, invalidates Lenard's assumption that longer luminescence corresponds to a greater vol. of the luminescence centers consisting of an activator atom surrounded by a large no. of host atoms. X-ray exam. confirmed Frey's (C.A. 44, 3358a) finding that on comminution the original wurtzite structure of ZnS and ZnS-CdS goes over into the sphalerite structure, but, contrary to P.'s conclusion, that transition does not det. the change of luminescence. This follows from the observation that ZnS-Mn, which had the sphalerite structure from the outset and underwent no change of structure on comminution, and ZnS-Cu, which on grinding changed its structure from wurtzite to sphalerite, both showed the same decrease of the brightness of luminescence. The main factor responsible for the observed effects of the comminution is the distortion and deformation of the lattice, and this point of view is borne out by the observed increased diffuseness of x-ray diffraction lines in all comminuted samples. N. Thou





1965

VEITS, Veniamin Isaakovich

DECEASED

1905-1961

ELECTRIC POWER

KRASNICKAS, K.; VEITIENE, J.

Domicillary treatment of acute non-specific pneumonias under conditions
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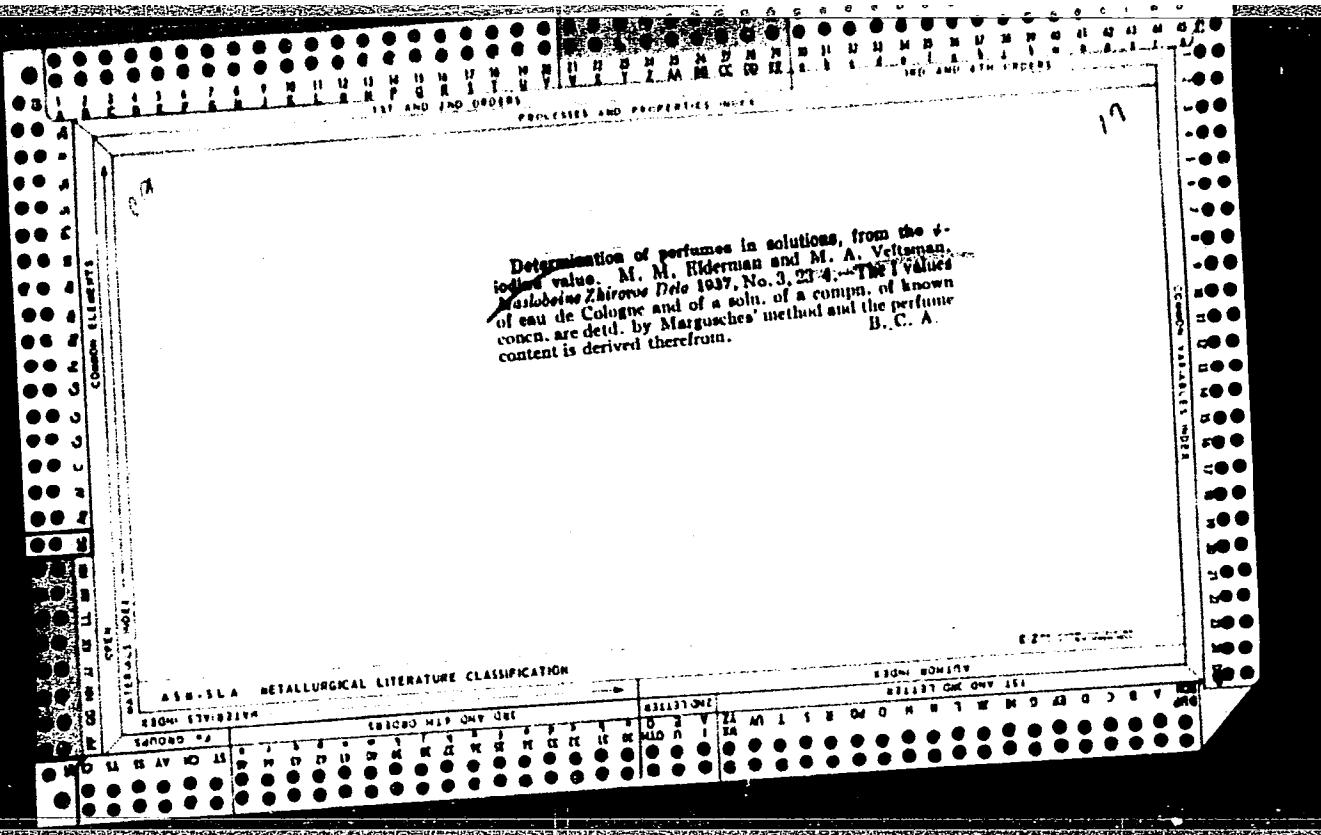
1. Vilniaus I tarybines klinikines ligonines (vyr. gyd. V. Bernackis)
polyklininis skyrius (vyr. gyd. pavad. L. Slucevskaja).
(PNEUMONIA)

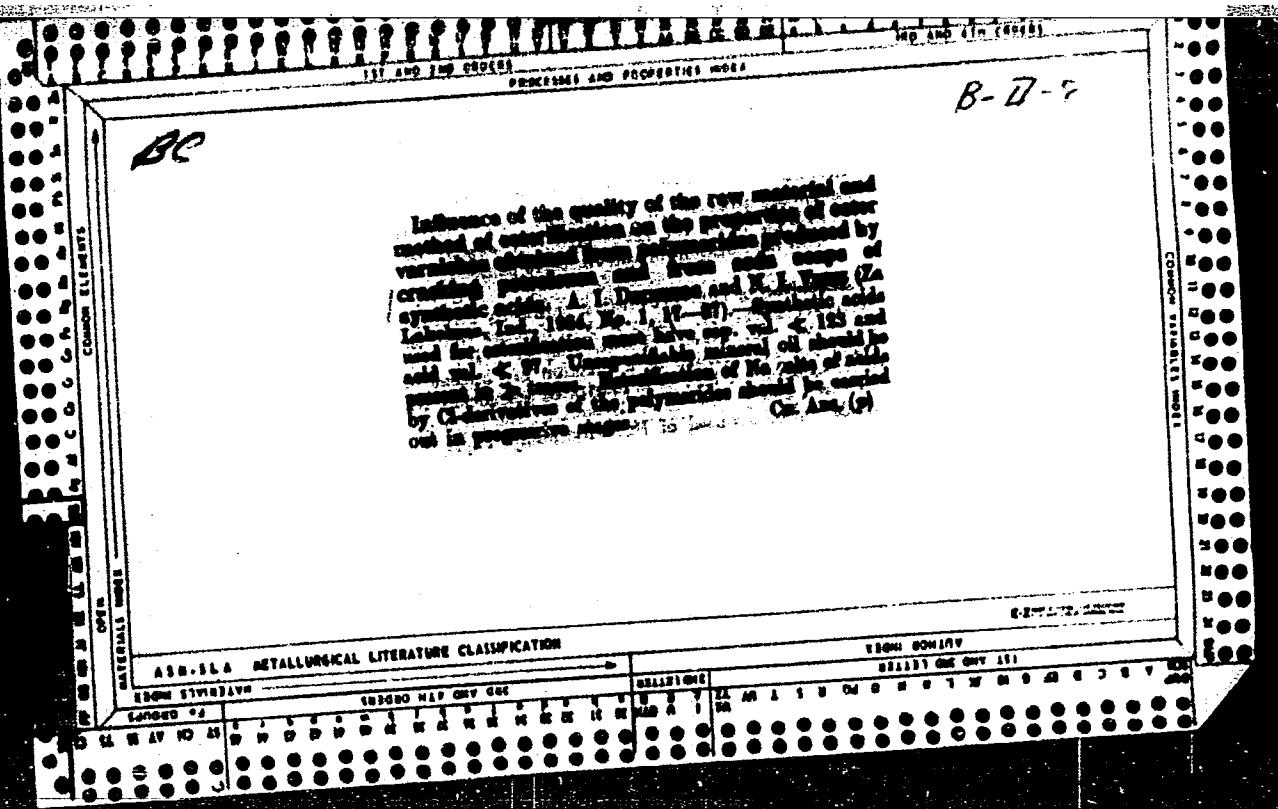
CA

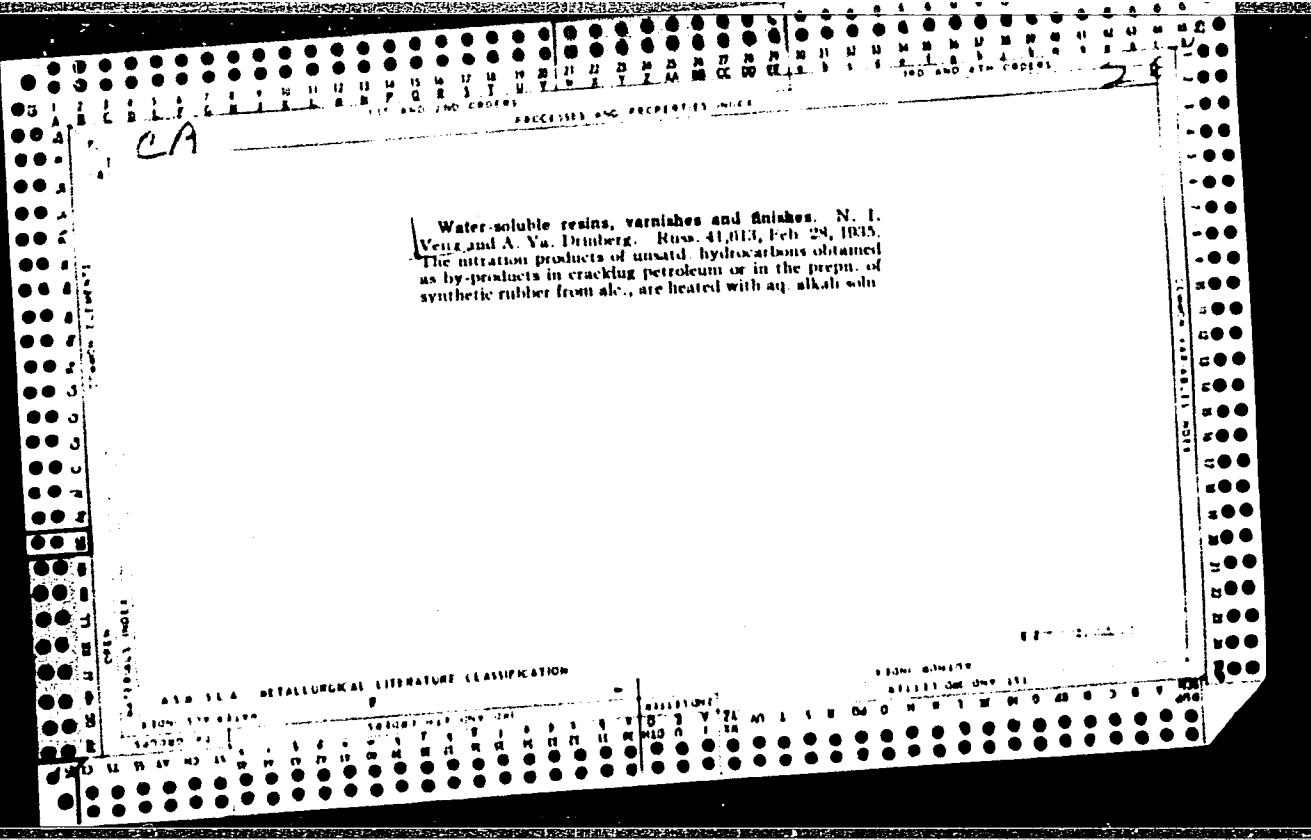
26

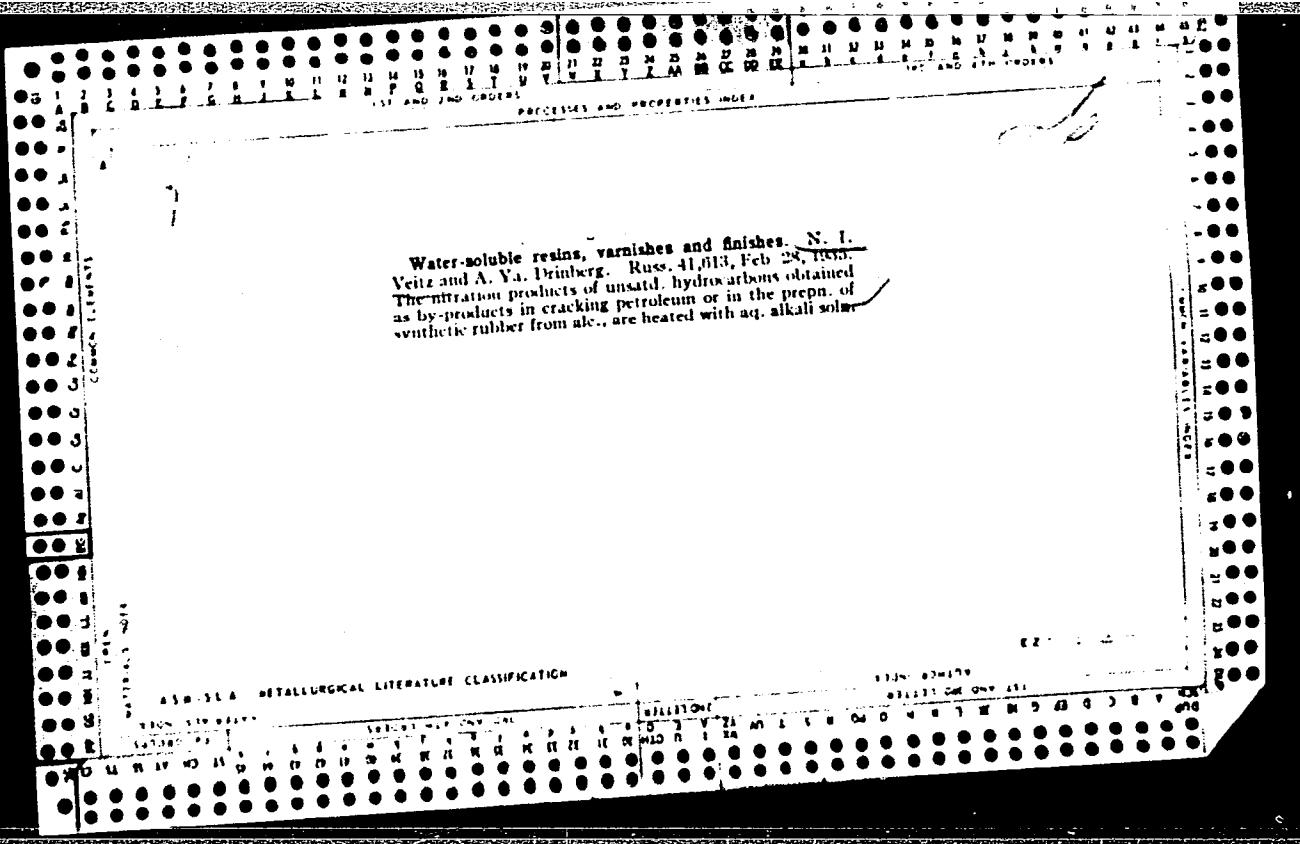
Influence of the quality of the raw material and the method of esterification on the properties of ester varnishes obtained from polymers produced by cracking petroleum and from soda soaps of synthetic acids. S. Ya. Drinberg and N.I. Veitz. Za Lakokrasochnyu Ind. 1934, No.1, 17-27; Chimie & Industrie 33, 690.- In order that they may be used for the production of complex esters, the synthetic acids obtained from solar oil must have an acid no. of at least 97 and a sapon. no of at least 123; unsaponifiable mineral oils must be present in traces only. The sapon. method also plays a large part; the best method consists in using dil. NaOH solns. Es-

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION









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811-818 Jl '64

1. Lucrare efectuata in Clinica I si a II-a medicala, in colabo-
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VEJBORA, O.; FRANCOVA, D.

Influence of endotoxin and tuberculin on lymphocytes isolated from
normal rabbits and rabbits sensitized with BCG vaccine. Cas. lek.
cesk. 102 no.14:372-378 5 Ap '63.

1. Mikrobiologicky ustav lekarske fakulty KU v Hradci Kralove, prednosta
MUDr. O. Vejbora Ustav ser a ockovacich latek v Praze, reditel MUDr.

J. Malek.
(ENDOTOXIN) (TUBERCULIN) (SALMONELLA PARATYPHI)
(BCG VACCINATION) (LYMPHOCYTES)

VEJBORA, O.; JOHANOVSKY, J.; VRANA, M.

Dynamics of changes in specific hypersensitivity and of the nonspecific increase in sensitivity to endotoxin in BCG-sensitized mice. Folia microbiol. 6 no.6:370-378 '61.

1. Institute of Sera and Vaccines, Prague 12.

(BCG VACCINATION) (TOXINS AND ANTITOXINS)

CZECHOSLOVAKIA

VEJBOŘA, O.

VEJBOŘA, O., MÍKANCOVÁ, D., Institute of Microbiology of the Faculty of Medicine of the Comenius University, Head O. Vejbořa, M.D. (Mikrobiologický ústav Lekarské fakulty KU) Krabice, M.D. (Institut pro Serum a Imunologické Substančky Královské Vinohrady, Institut pro Serum a očkovací látka, Head J. Malek, M.D. (Ústav sít a očkovacích látak, vedl MUDr J. Malek), Prague.

"Influence of Endotoxin and Tuberculin on Lymphocytes Isolated from Normal Rabbits and Rabbits Sensitized with BCG Vaccine."

Prague, Československá Lékařská, Vol. 102, No. 1, 3 Apr 1963, pp 372 - 378.

Abstract (Authors' English summary modified): Effect of PPD tuberculin and endotoxin S. paratyphi B was tested on lymphocytes isolated from rabbits. Nonspecific antigen is more toxic to sensitized than normal cells; specific antigen shows immunologically specific reactions.

4 Figures, 4 Tables, 27 Western, 6 Czech references.

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in chronic pyelonephritis. Vnitri lek. 11 no.9:873-877
S '65.

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v Hradci Kralove (prednosta prof. Dr. Vilo Jurkovic, Dr.Sc.)
a Ustav lekarske mikrobiologie lekarske fakulty Karlovy Uni-
versity v Hradci Kralove (prednosta Dr. O. Vejbora).

PEKAREK, Jan; VEJBORA, Oldrich

Pertussis parapertussis vaccine. Cesk.epidem.mikrob.imun.10 no.2:
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1. Ustav ser a ockovacich latek v Praze.
(WHOOPING COUGH immunol)

ca

1d

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Z. Veldekk, *Chem. Listy* 37, 137-8 (1943). --*m*-O₂NCO₂(Me)₂ (18 g.) in 80 ml. H₂O was heated with 7 g. NaH₂O₂ until all the ester dissolved. The hydrazide m. 132° (from MeOH or H₂O). Milos Hudlicky

CA

Nitrogen-substituted thioureas in analytical chemistry.
Z. Buršidová and Z. Veldík. (United Pharm. Works,
Prague, Czech.). *Chem. Listy* 45, 38 (1951). - Aq. solns.
(1%) of 17 substituted thioureas were tested for Bi and cat-
ions of groups I and II. The color developed was in all
cases weaker than that with thiourea itself. M. Hudlický

1951

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Praha, Czechoslovakia).

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VEJCHODA. J.

Fast-operating vises. p. 490

TECHNICKA PRACA. Bratislava, Czechoslovakia, Vol. 7, No. 11, No. 1955

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

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Colors at work sites. p. 301.
STROJIRENSKA VYROBA, Prague, Vol. 3, no. 7, July 1955.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 6,
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strojirenstvi) Praha, Vol. 3, No. 6, June 1955

SOURCE: East European Accessions List (EEAL) Library of Congress,
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Block assembly of the supporting structure for steam boilers.

p. 335
Vol. 3, no. 8, 1955
STROJIRENSKA VYROBA
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Source: Monthly List of East European Accesions, (EEAL), LC, Vol. 5, no. 2
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VEJCHODA, J.

"LUBRICATION of Machines and Lubrication Plans", P. 278. (TECHNICKA
FRACA, Vol. 6, No. 5, May 1954, Bratislava, Czechoslovakia)

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"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001859230004-9

VEJDELEK, C.

"Danger of Fire from Uncooled Surfaces of Electric Machinery." p. 184, Praha, Vol. 4, no. 4,
Apr. 1954.

SO: East European Accessions List, Vol. 3, No. 9, September 1954, Lib. of Congress

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001859230004-9"

VEJDELEK, C.

Danger of fire from uncooled surfaces of electric machinery. P. 184.

SG: East European Accessions List, Vol. 3, No. 9, Sept. 1954, Lib. of Congress

VEJDĚLK, O.

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SOURCE: East European Accessions List, Vol. 5, n. 9, September 1956

Vejdelek, O.

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ELEKTROTECHNIK

SO: Monthly List of East European Accession, (EEAL), LC, Vol. 4, No. 9,
Sept. 1955, Uncl.