ACC NR: AR6020073 SOURCE CODE: UR/0124/66/000/001/B141/B141

AUTHOR: Pilatovskiy, V. P.

TITLE: New plane problems in the motion of an interface between two fluids in a non-homogeneous filtration flow and their exact solution

SOURCE: Ref zh. Mekhanika, Abs. 1B992

REF SOURCE: Tr. Vses. neftegaz. N.-i. in-t, vyp. 42, 1965, 90-92

TOPIC TAGS: fluid flow, boundary layer, petroleum engineering

ABSTRACT: The author solves several problems on filtration of two fluids separated by a movable interface in a thin inclined stratum. The possibility of a compression shock at the interface due to capillary forces is taken into account. Consideration is also given to the possibility of a change in boundary conditions at the interface due to formation of a mixture of the given fluids behind the interface. The solution is sought in the form

$$\frac{\partial t}{\partial \omega} = f(\omega, t)$$

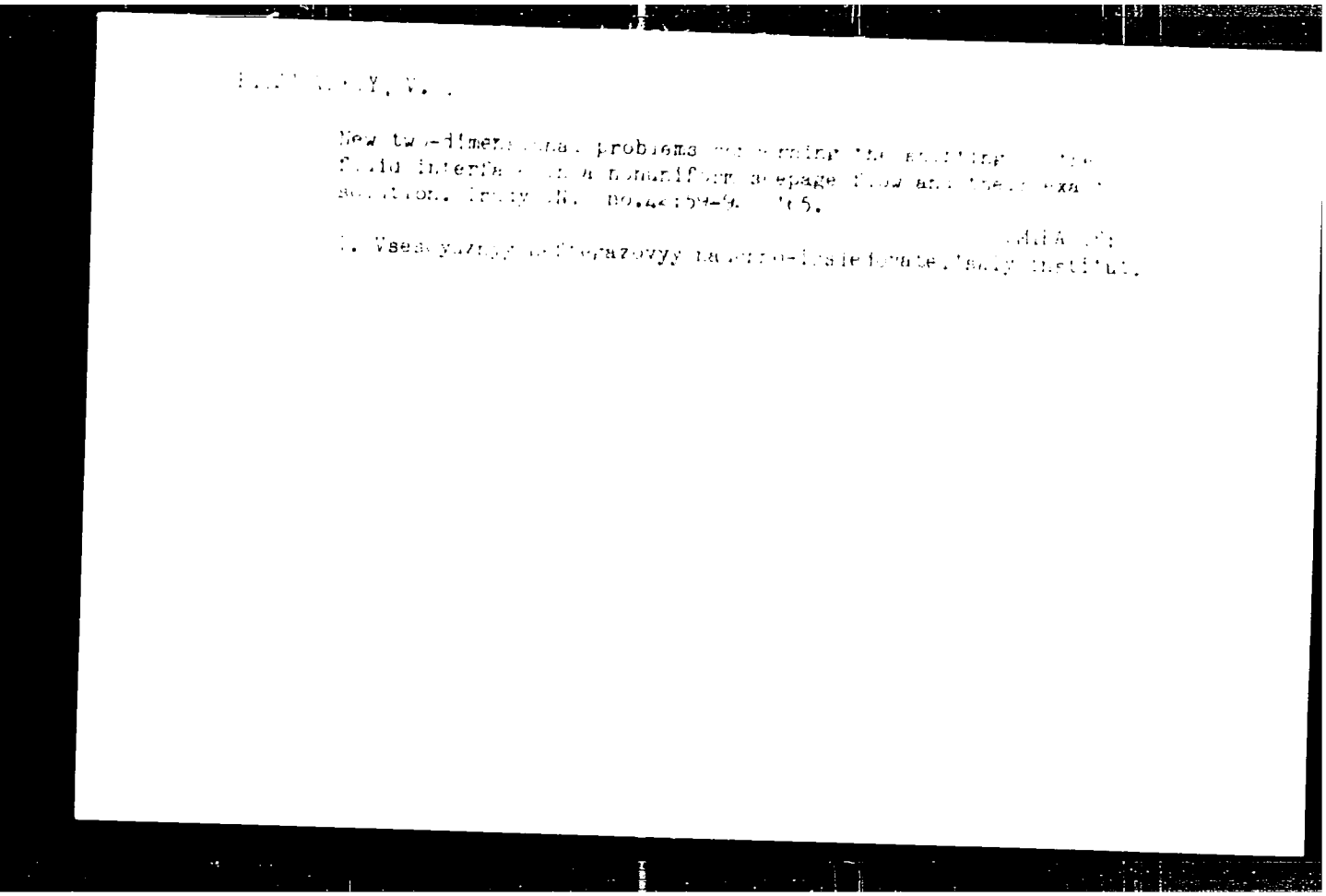
$$\frac{\partial w}{\partial t} = F(\omega, t) + \frac{1}{2\pi i}\int_{(\sigma)} \frac{\Phi(\sigma, t)}{\sigma - \omega}\, d\sigma$$

L 11208-67
ACC NR: AR6020073

where z is a complex coordinate of a point in the flow region, t is time, w is the characteristic function of the flow in one of the regions separated by the interface, $F(\omega,t)$ is a given function depending on the number and position of sources and sinks, ω is an auxiliary complex variable, Φ and f are the unknown functions. Problems are solved on the flow of oil into an isolated well, a symmetric system of wells and an infinite chain of wells. The proposed method is recommended by the author for solving problems on gas-capped petroleum deposits. Bibliography of 11 titles. N. V. Lambin. [Translation of abstract]

SUB CODE: 08, 20

Card 2/2 jb



PILATOVSKIY, V.P.

A probability method for determining petroleum reserves in pools. Nauch.-tekh. sbor. po dob. nefti no.17:5-11 '62.
(MIRA 17:8)

1. Vsesoyuznyy neftyanoy nauchno-issledovatel'skiy institut.

PILATOVSKIY, V.P.

A system [illegible]
VNII no.40: 38-156 '63

KAZYMOV, A. Sh.; PILATOVSKIY, V.P.

Displacement of the oil-water interface to a linear line of wells in an inclined layer. Trudy VNII no.40:157-166 '63 (MIRA 17:7)

PILATOVSKIY, V.P.

Equations of a nonhomogeneous fluid flow in a thin inclined layer. Trudy VNII no.37:14-28 '62. (MIRA 16:6)
(Oil reservoir engineering)

PILATOVSKIY, V.P.

Using the least squares method in mapping the most probable distribution of geophysical and hydrodynamic characteristics of a layer. Trudy VNII no.37:253-270 '62. (MIRA 16:6)
(Oil sands--Maps)

PILATOVSKIY, V.P.

Numerical solution of a problem of flooding oil from an inclined thin layer obtained on a digital computer. Nauch.-tekh. sbor. po dob. nefti no.15:5-10 '61. (MIRA 15:9)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut.
(Oil field flooding)
(Electronic digital computers)

PILATOVSKIY, V.P.; ROZENBERG, M.D.; EFROS, D.A. [deceased]

Some numerical methods for solving problems of two-phase fluid flow. Nauch.-tekh. sbor. po dob. nefti no.15:43-44 '61. (MIRA 15:9)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut.
(Oil reservoir engineering)

PILATOVSKIY, V.P.

Method for the numerical solution of problems of the displacement of water-oil interface in a thin layer. Nauch.-tekh. sbor. po dob. nefti no.16:13-20 '62. (MIRA 15:9)

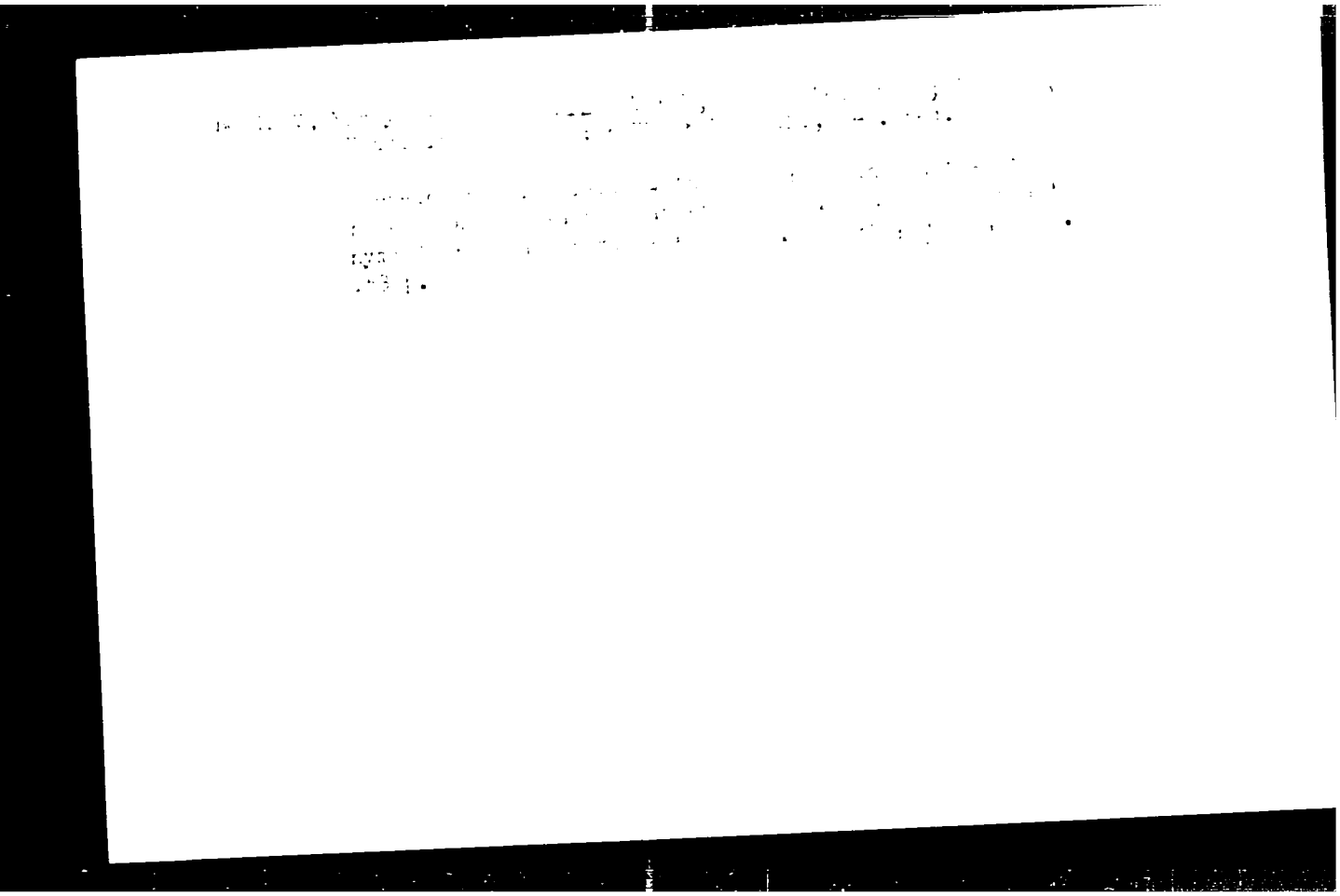
1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut.
(Oil reservoir engineering)

KRISTEA, N.[Cristea, N.], doktor inzh.; AKOSH, Ban[Acos, Ban (translator)]; FILATOV, V.P., doktor fiz.-mat. nauk, red.; LAPUKHINA, Ye.I., ved. red.; POLOZHA, A.S., tekhn. red.

[Underground hydraulics]Podzemnaia gidravlika. Moskva, Gos. toptekhizdat. Vol.2. 1962. 400 p. Translated from the Rumanian. (Oil reservoir engineering) (MIRA 15:11)

PILATOVSKIY, V.P. (Moskva)

Analytical solution of the problem of the displacement of petroleum by water with formation of a water-oil mixture in a thin inclined layer and constant pressure drop. PMTF no.1:143-152 Ja-F '62. (MIRA 15:4)
(Petroleum geology) (Soil percolation)



NOSOV, S.D., prof.; LADODO, K.S., kand.med.nauk; KUZ'MINSKAYA, G.Ya.; NIKOLAYEVSKIY, G.P.; ITSKLIS, F.G.; VINTOVSKINA, I.S.; KAGANOVICH, N.I., ZHUKOVA, L.D.; MIL'NER, B.I.; OSHEROVICH, A.M. PILATSKAYA, Ye.P.

Clinical epidemiological characteristics of certain viral infections in children's institutions. Pediatriia 39 no.4:6-13 Ap '61. (MIRA 14:4)

1. Iz otdela detskikh infektsii (zav. - prof. S.D. Nosov) Instituta pediatrii AMN SSSR i epidemiologicheskogo otdela (zav. - S.A. Samvelova) Moskovskoy gorodskoy sanitarno-epidemiologicheskoy stantsii.

(VIRUS DISEASES)

KHAPKINA, V.V.; PILATSKIY, P.O.

Automatic machine for assembling cardan axle crosspieces. Avt.prom. no.11:37-38 N '60. (MIRA 13:11)

1. Moskovskiy zavod malolitrazhnykh avtomobiley i Nauchno-issledovatel'skiy institut tekhnologii avtomobil'noy promyshelnnosti.
(Machine-shop practice)

PILATOVSKIY, V.P. (Moskva)

Displacement of water-oil interface in a horizontal stratum. Izv. AN SSSR. Otd. tekh.nauk Mekh. i mashinostr. no. 1:127-130 Ja-F '60. (MIRA 14:2)

(Oil well flooding)

PILATOVSKIY, V.P., dotsent, doktor fiziko-matematicheskikh nauk

Distribution of disturbances along the contact surface in case of inhomogeneous percolating flow formed by relative sliding of liquids. Nauch.zap.MIIVKH 22:74-85 '60.
(MIRA 13:8)

(Water, Underground)

PILATOVSKIY, V.P., dotsent, doktor fiziko-matematicheskikh nauk

Interaction of wells draining artesian aquifers containing a foreign simply connected region. Nauch.zap. MIIVKH 22:86-91 '60. (MIRA 13:8)

(Water, Underground)

PILATOVSKIY, V.P., dotsent, kand.fizikomatematicheskikh nauk

Formulation and investigation of problems of the stability of displacement of separating boundaries between liquids in an inhomogeneous percolating flow. Nauch.zap. MIIVKH 20:330-352 '58. (MIRA 13:6)

(Hydraulics)

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S/124/60/000/006/[illegible]
A005/A001

17.4430

10.1000 (new)

Translation from: Referativnyy zhurnal, Mekhanika, 1960, No. 6, p. 123, # [illegible]

AUTHOR: Pilatovskiy, V.P.

TITLE: On Certain General Concepts Related to the Two-Dimensional Filtration Stream

PERIODICAL: Nauchno-tekhn. sb. po dobyche nefti. Vses. neftegaz. n.-i. in-t, 1959, No. 4, pp. 19-21

TEXT: A uniform filtration stream of an incompressible liquid is considered, which has constant viscosity μ = const within the region Δ of a two-dimensional homogeneous horizontal stratum of a unit thickness. The filtration is determined by the prescribed complex potential $w = \varphi + i\psi$. Under these conditions, the formulae are derived for determining the liquid discharge through a prescribed arc γ and the circulation of the filtration speed along the arc γ; moreover, the formula is given for determining the average value of the velocity potential in case of γ being a circular arc.

P.F. Fil'chakov

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

Card 1/1

PILATOVSKIY, V. P., PISKUNOV, N. S., ROSENBERG, M. D., EFROS, D. A., BORISOV, Yu. P., KRYLOV, H. P. (Moscow)

"The Hydrodynamic Problems of Oil Field Exploitation."

report presented at the First All-Union Congress on Theoretical and Applied Mechanics, Moscow, 27 Jan - 3 Feb 1960.

PILATOVSKIY, V. P. (Moscow)

"On the Motion of the Contact Surface Between Two Fluids in a Horizontal Layer."

report presented at the First All-Union Congress on Theoretical and Applied Mechanics, Moscow, 27 Jan - 3 Feb 1960.

PILATOVSKIY, V. P. Doc Phys-Math Sci -- (diss) "Solution of certain problems of underground hydrodynamics." Mos, 1957. 17 pp (Min of Agriculture USSR. Mos Inst of Engineers of Water Resources im V. P. Vil'yams). 110 copies. List of author's works, p 16-17 (17 titles). (KL, 6-58, 98)

SOV/24-58-7-10/36

AUTHOR: Pilatovskiy V. P. (Moscow)

TITLE: On the Problem of the Unsteady Flow of Ground Water into a Drain Placed in a Stratum of Infinite Depth (K zadache o neustanovivshemsya pritoke gruntovykh vod k drene v sloye beskonechnoy glubiny)

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye tekhnicheskikh nauk 1958, Nr 7, pp 70-75 (USSR)

ABSTRACT: The author describes a system of the functional equations describing the division of two liquids forming a uniform flow in the thin inclined layer Oxy divided into D_1 and D_2 parts by the boundary line . . The liquid in D_1 has a specific weight γ_1 = const viscosity μ_1 = const while the liquid in D_2 has γ_2 and μ_2 both constant. The sources of supply are situated at the points

z_j $(j = 1 \ldots n)$, the intensities of which are calculated from $A_j = q_j / 2\pi$. These points represent

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On the Problem of the Unsteady Flow of Ground Water into a Drain Placed in a Stratum of Infinite Depth

the wells with a production q_ν ($\nu = 1 \ldots n$). The displacement of the division line σ can be defined by a complex function of two variables, s and t (Eq (1) where s - parameter determining the position of a point M along σ, t - parameter determining the position of σ at an instant t). The corresponding flow on the plane $z = x + iy$ can be described by the complex potential $w(z, t)$ (Eq 2, φ - function of the current, p - hydrodynamic pressure at the point z in the layer Oxy, k - effective permeability of the layer $k = k_1$ if z is in D_1 or $k = k_2$ if z is in D_2). The complex velocity $u - iv$ is found from Eq (3) (u, v - projected velocity along Ox and Oy respectively). The controlling vector at the point $M(\zeta)$ on σ is described by the formula (4) where $L = L(s, t)$ depends on s. The values of s and ζ are related as shown in Eq (5). The projected rates of filtering on the tangent (τ) and on the normal (ν) to M (for $z = \zeta$) are found from Eq (6) (Fig 1). The conditions of displacement of σ are as follows: 1) the hydrodynamic pressure p on σ should vary as in Eq (7) (p_1^* and p_2^* - pressures at the points $M(\zeta)$ on

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On the Problem of the Unsteady Flow of Ground Water into a Drain Placed in a Stratum of Infinite Depth

relate to D_1 and D_2 respectively), 2) the variations of the projected rate of filtration on the normal to the point $M(\zeta)$ are continuous so that the expression (5) can be derived (V_n - rate of displacement of the line Γ at $M(\zeta)$ in the direction of the normal to Γ, m = const = porosity of the layer). In general the complex velocity $dw/d\zeta$ at the points $M(\zeta)$ on Γ can be defined by Eqs (9) and (12) which are derived from (1-8). The potential $w(z,t)$ in $D = D_1+D_2$ can be determined from Eq (14) and the system of functional equations describing the displacements of Γ can be shown as Eq (15) which can be written in a general expression (16). An example (Fig 2) is given where a drain with the radius r_0 is placed at the depth h below a layer of ground water. The displacement of the boundary line Γ, the discharge $q(t)$ of the drain and the difference of pressure $p_1 - p_2$ between those of the drain and the free surface can be derived from the

Card 3/4

On the Problem of the Unsteady Flow of Ground Water into a Drain Placed in a Stratum of Infinite Depth

formulae (28) and (33). The discharge, found from Eq (33), determines the potential $\Delta\varphi$ as a function of time. In the case when $q(t) = q_c = \text{const}$, the formula (34) can be used instead of Eqs (28) and (33). The calculation can be applied to any number of drains placed at any position below the horizontal level of the ground water. There are 2 figures and 3 Soviet references.

SUBMITTED: November 18, 1957

PILATOVSKIY, V.P. (Moskva).

Investigation of the stability of an inhomogeneous seepage flow in a thin conical layer. Izv. AN SSSR. Otd. tekh. nauk. no.11: 43-49 N '58. (MIRA 12:1)

1. Moskovskiy institut inzhenerov vodnogo khozyaystva.
(Hydrodynamics)

SOV/24-58-11-12/42

AUTHOR: Pilatovskiy, V. P. (Moscow)

TITLE: Investigation of the Stability of a Non-uniform Filtration Stream in a Thin Conical Stratum (Issledovaniye ustoychivosti neodnorodnogo fil'tratsionnogo potoka v tonkom konicheskom plaste

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1958, Nr 11, pp 43-49 (USSR)

ABSTRACT: Formulation of the problem: the non-uniform filtration flow is considered of two hydro-mechanically differing liquids in a thin conical layer (see earlier work of the author, Ref 1), the generatrices of which form with the horizontal plane E equal angles α. Let us assume that the filtering layer at the surface of the circular cone AOB is sub-divided into two "simply connected" regions D_1 and D_2 with a mobile boundary of division of the liquids Γ. The region D_1 with the apex O of the cone AOB is saturated with a liquid of the specific gravity γ_1 = const and the viscosity μ_1 = const. The region D_2 is saturated with a liquid of the specific gravity γ_2 = const and the viscosity μ_2 = const.

Card1/3

Investigation of the Stability of a Non-uniform Filtration Stre
in a Thin Conical Stratum

effective permeabilities of the regions D_1 and D_2 are respectively k_1 = const and k_2 = const. The permeability of the stratum is everywhere equal, m=con
The law of movement of the line Γ for certain boundary and initial conditions is expressed by the complex function:

$$\zeta = \zeta(s,t) = R(s,t)\, e^{is} \quad (-\pi \leqslant s \leqslant \pi$$

$$R(s,t) = \rho^n(s,t), \quad s = n\theta, \quad n = \sec$$

where $R(s,t)$ is some real function of two real parameters s and t which determine the location of the point M by the values of the parameter s and the time t. $\rho(s,t)$ designates the distance of the point of the conical surface AOB from the apex O; θ determines the angle between the generatrices OB and OM after developing the conical surface AOB onto some complex plane z. The [illegible] of equations (7), p 44, permits investigating the qualitative character of the disturbed movement of [illegible]

Card2/3

SOV/24-58-11-12/42

Investigation of the Stability of a Non-uniform Filtration Stream in a Thin Conical Stratum

non-uniform flow in the first approximation and the system of equations is applied for solving the problem of the conditions under which a known non-uniform filtration flow will be stable or unstable. In the further part of the paper the author deals with systems of equations which determine disturbances of the first order and investigation of the stability of a non-uniform symmetrical flow in a conical stratum. In the last part of the paper an example is included of investigating the stability of a non-uniform symmetrical conical flow. There are 2 Soviet ref.

ASSOCIATION: Moskovskiy institut inzhenerov vodnogo khozyaystva (Moscow Institute of Water Engineers)

SUBMITTED: April 2, 1958

Card 3/3

Translation from: Referativnyy zhurnal, Geol giya, 19[illegible], Nr [illegible], p 252 (USSR)

AUTHOR: Pilatovskiy, V. I.

TITLE: Problem of Working Oval Petroleum Deposits. Determination of Production and of Bottom Pressures of Elliptical Batteries (K voprosu o razrabotke oval'nykh neftyanykh mestorozhdeniy. Opredeleniye debitov i zaboynykh davleniy ellipticheskikh batarey)

PERIODICAL: Tr. Vses. neftegaz. n.-i. in-t, 1956, Nr 8, pp 114-141

ABSTRACT: Bibliographic entry

Card 1/1

15-57-7-10359

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 7, p 252 (USSR)

AUTHOR: Pilatovskiy, V. P.

TITLE: Interaction of Galleries Which Drain a Stratum, Worked by the Buoyant Method Under Constant Pressures on the Galleries (Vzaimodeystviye galerey, dreniruyushchikh plast v usloviyakh uprugogo rezhima pri postoyannykh davleniyakh na galereyakh)

PERIODICAL: Tr. Vses. neftegaz. n.-i. in-t, 1956, Nr 8, pp 179-207

ABSTRACT: Bibliographic entry

Card 1/1

PIL[illegible], V.P. (Moscow)

Problem of nonstationary inflow of ground water to [illegible] infinite depth layers. Izv. AN SSSR. Otd.tekh.nauk [illegible]. : 70-75 Jl '58. (MIRA 11:7)
(Drainage) (Water, Underground)

AUTHOR: Pilatovskiy, V.P. (Moscow) SOV/41-10-2-5/17

TITLE: The Formulation and Investigation of Stability Problems for the Displacement of the Boundary of two Liquids During an Inhomogeneous Flow of Filtration (Postanovka i issledovaniye zadach ob ustoychivosti peremeshcheniya granitsy razdela zhidkostey v neodnorodnom fil'tratsionnom potoke)

PERIODICAL: Ukrainskiy matematicheskiy zhurnal, 1958, Vol 10, Nr 2, pp 160-177 (USSR)

ABSTRACT: Let a porous medium be flown through by two liquids with viscosities μ_1, μ_2 and specific gravities γ_1, γ_2. If a surface F is laid through the medium, then the boundary of the two liquids may be represented by the curve Γ running on F. Γ varies according to a certain law during the inhomogeneous filtration flow, whereby also disturbances can occur. If the normal component of the disturbance becomes smaller with the time, then the author denotes Γ as being stabl The stability conditions are investigated.
After this general formulation the author restricts himself in more detailed investigations to a thin plane layer of the porous medium which forms the angle α with the horizontal

Card 1/2

The Formulation and Investigation of Stability Problems SOV/41-10-[illegible]
for the Displacement of the Boundary of two Liquids During an Incompressible
Flow of Filtration

plane, and later on he even restricts himself only to the case of a rectilinear boundary Γ with translation motion. In this special case the author gives a stability condition which he has already formerly published [Ref 9].
There are 2 figures, and 14 references, 12 of which are Soviet, 1 American, and 1 English.

SUBMITTED: October 28, 1956

1. Liquids--Boundary layer 2. Boundary layer--Stability
3. Fluid flow--Theory 4. Mathematics

Card 2/2

PILATOVSKIY, V.P.

Propagation of turbulences along the boundary of separation when an unhomogeneous flow is formed in porous media by relative sliding of fluids [with summary in English]. Ukr. mat. zhur. 10 no.3: 280-288 '58. (MIRA 11:11)

(Fluid dynamics)

124-58-9-10183D

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 9, p ... (USSR)

AUTHOR: Pilatovskiy, V. P.

TITLE: Solution of Some Problems of Underground Hydrodynamics (Reshenıye nekotorykh zadach podzemnoy gidrodinamiki)

ABSTRACT: Bibliographic entry on the author's dissertation for the degree of Doctor of Physical-Mathematical Sciences, presented to the Mosk. in-t inzh. vodn. kh-va (Moscow Institute of Hydrological Engineering), Moscow, 1957

ASSOCIATION: Mosk. in-t inzh. vodn. kh-va (Moscow Institute of Hydrological Engineering), Moscow

1. Hydrology 2. Hydrodynamics

Card 1/1

PILATOVSKIY, V.P.

Definition and investigation of problems on the stability of boundary shifts of liquids in a heterogeneous filtration stream [with summary in English]. Ukr. mat. zhur. 10 no.2:160-177 '58. (MIRA 11:6)
(Hydrodynamics) (Functional equations)

PILATOWICZ, Andrzej, mgr inz.

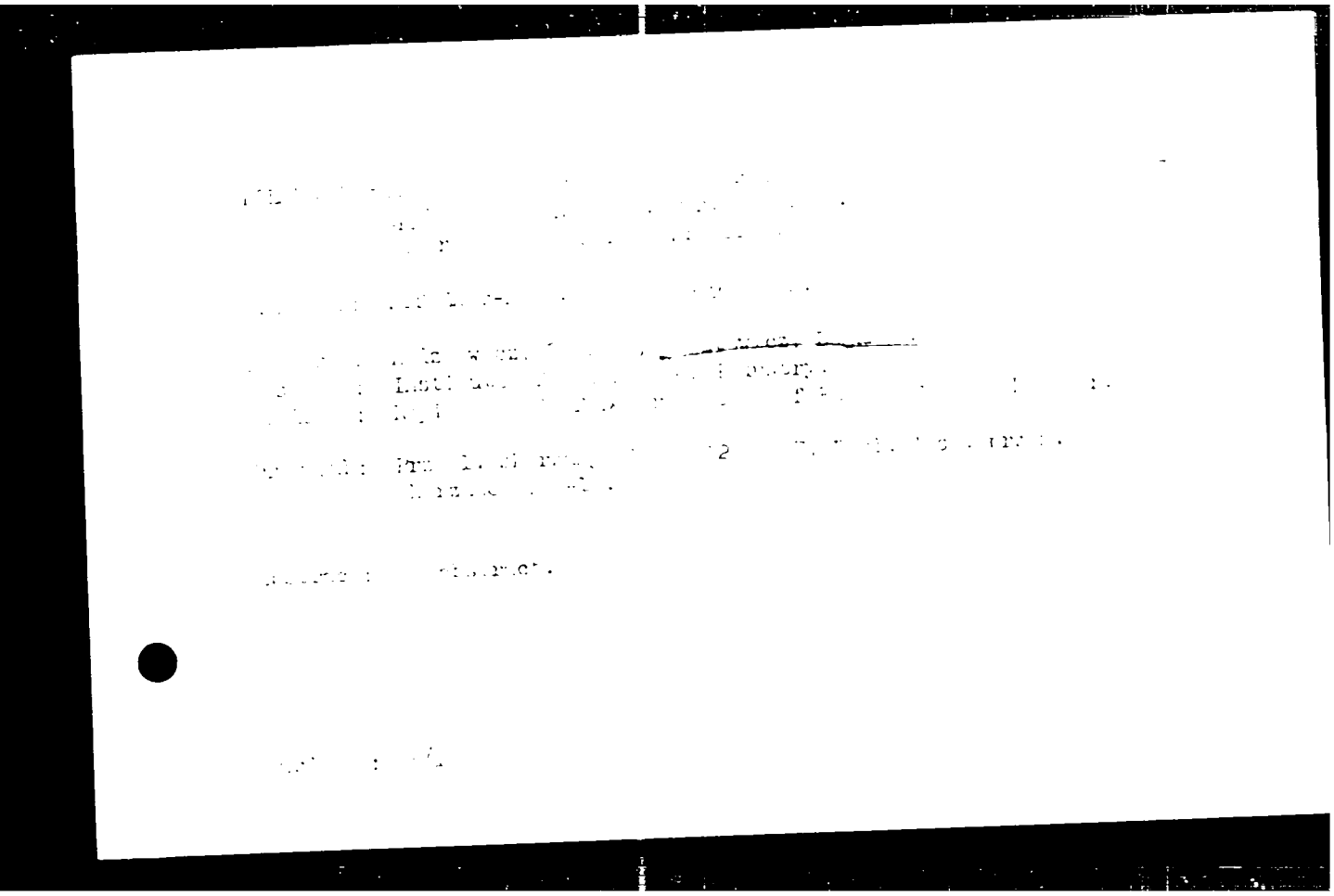
Influence of the characteristics of the feeding voltage on the quality of TV reception. Przegl elektrotechn 11 no. 4:174-176 Ap '64.

PILATOWICZ, Andrzej, mgr., inż.

Harmonic contents in the voltage curve. Energetyka przem 10 n-.1: 24-28 '62.

PILATOWICZ, Andrzej, mgr inż.

Optimum spatial arrangement of pole-fixed capacitors in distribution networks of medium voltage. Przegl elektrotechn 39 no.1 [illegible] '63.



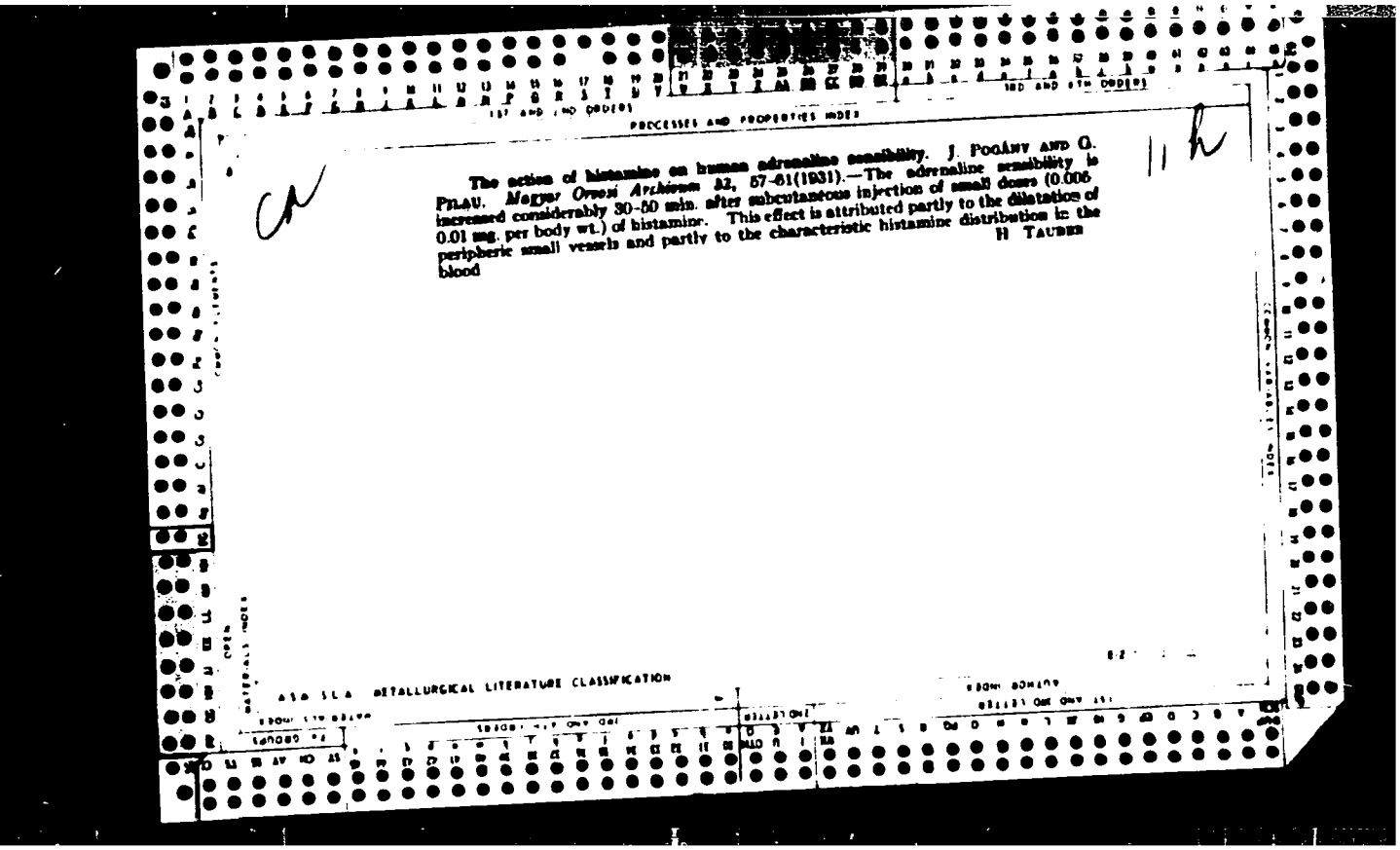
PILATOWICZ, Irena (Warszawa)

Method of settling up the general cost account inducing the shortening of the production processes in the apartment building industry. Przegl budowl i bud mieszk 34 no.1:40-42 Ja '62.

LADODO, K.S., kand.med.nauk; VINTOVKINA, I.S.; SUN LIN'-LIN' [Sung Lin-Lin]; PILATSKAYA, Ye.P.; NIKOLAYEVSKIY, G.P.

Clinical characteristics of influenza caused by the A2 virus in restricted children's institutions, according to data from 1960 to 1961. Pediatriia 42 no.1:42-47 Ja'63. (MIRA 16:10)

1. Iz otdela ostrykh detskikh infekstiy (zav. - prof. S.D.Nosov) Instituta pediatrii (dir. - dotsent M.Ya. Studenikin) AMN SSSR i epidemiologicheskogo otdela (zav. S.A.Sambelova) Moskovskoy gorodskoy sanitarno-epidemiologicheskoy stantsii.
(INFLUENZA--MICROBIOLOGY) (CHILDREN--DISEASES)



PROCESSES AND PROPERTIES INDEX

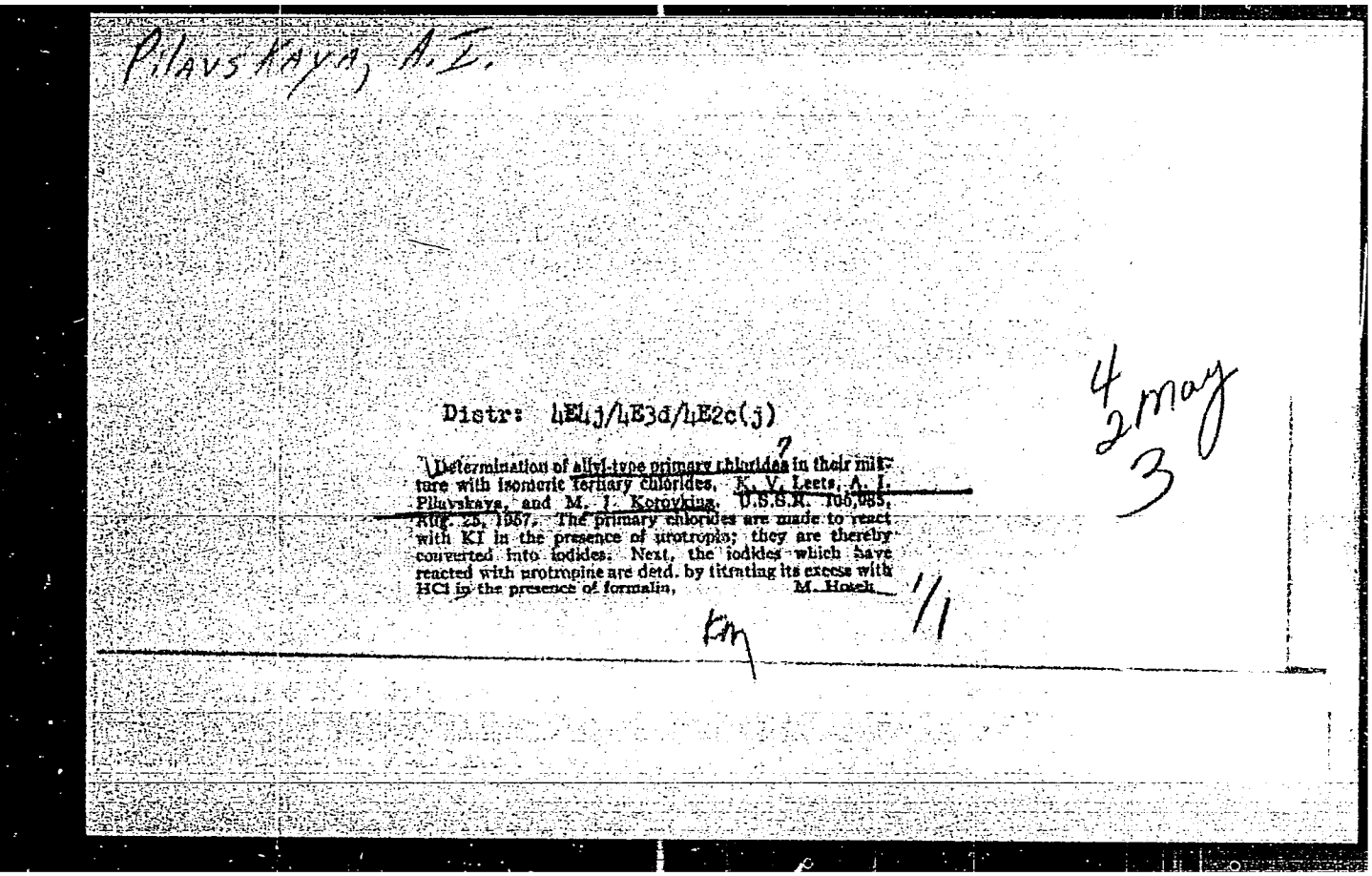
The action of histamine on human adrenaline sensibility. J. Poolny and O. Pilau. *Magyar Orvosi Archivum* 32, 57-61(1931).—The adrenaline sensibility is increased considerably 30–50 min. after subcutaneous injection of small doses (0.005–0.01 mg. per body wt.) of histamine. This effect is attributed partly to the dilatation of peripheric small vessels and partly to the characteristic histamine distribution in the blood

H Tauber

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION

PILAVA, N.

Sulfide deposits of central Sweden. Geol.rud.mestorozh. 5
no.1:105-108 Ja-F '63. (MIRA 16:3)
(Sweden--Sulfides)



Pilavskaya, A. I.

Distr: 4E4j/4E3d/4E2c(j)

Determination of allyl-type primary chlorides in their mixture with isomeric tertiary chlorides. K. V. Leets, A. I. Pilavskaya, and M. I. Kotovkina. U.S.S.R. 106,985, Aug. 25, 1957. The primary chlorides are made to react with KI in the presence of urotropin; they are thereby converted into iodides. Next, the iodides which have reacted with urotropine are detd. by titrating its excess with HCl in the presence of formalin. M. Hosek

4
2 May
3

NIEWODNICZANSKI, H.; MELZACKI, K.; [illegible], [illegible].; [illegible]AWA, [illegible].

A double-beam photoelectric spectrometer. Inst fiz jadr [illegible] no.217:1-19 [illegible]64.

1. Institute of Nuclear Physics, Krakow, of the [illegible] of Sciences.

POLAND

PASICH, J. and PILARSKA, E. [Affiliation not given]

"A Method for Quantitative Determination of Quinine and Papaverine in Suppositories Using Cationite-Impregnated Paper"

Warsaw, Farmacja Polska, Vol 23, No 2, February 67, pp 105-108

ABSTRACT: A method is given for determining the hydrochlorides of Quinine and papaverine in a fat medium contained in Rectocarbon suppositories (Polfa), using Whatman No 3 paper impregnated with polyphenyl sulfonate resin in the calcium form. The chromatograms were studied by UV spectroscopy. Determination accuracy of -0.6 to +1.3% is claimed. Contains 5 Figures, 1 Table and 19references (16 Polish, 2 Western and 1 German-language).

1/1

CEZAK, Leszek, HRYNIEWICZ, Zofia; RUSIN, Jan, PILAWSKA, Halina

Result of studies on the method of feeding children in one township of Szczecin Voivodeship. Pol. Rocz. panst. zakl. hig. 15 no.3:277-282 '64.

1. Voivodeship Station of Sanitation and Epidemiology, Szczecin. Director: [Lek. med.] J.Markowicz.

PILAWSKA, Halina

Evaluation of the physical development and health status of children in the lower grades, born and living in Szczecin. Roczn. pom. akad. med. Swierczewski. 8:181-210 '62.

1. Z Zakladu Higieny Pomorskiej Akademii Medycznej Kierownik: doc. dr med. I. Gadzikiewicz.
(GROWTH) (SOCIAL CONDITIONS)

PILAWSKA, Halina

Accidents in school children in the territory of the Szczecin Region.
Pediat Pol 37 no.2:191-198 F '62.

1. Z Zakladu Higieny PAM w Szczecinie Kierownik: doc. dr med.
I. [redacted]dzikiewicz.

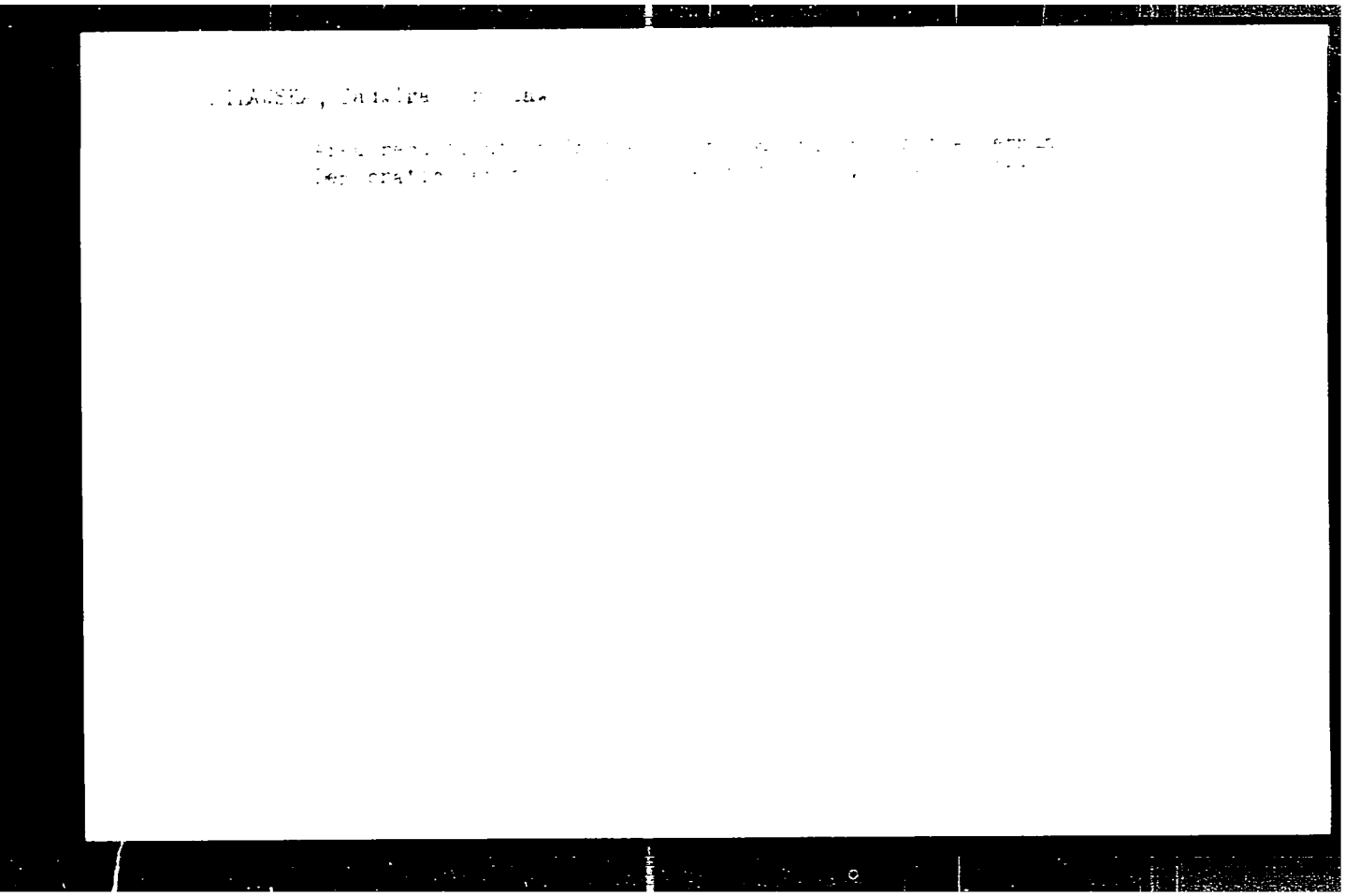
(ACCIDENTS in inf & child)

PILAWSKA, J.

PILAWSKA, J. [illegible]

Vol 27, no. 2, 1956
CLASSICISM [illegible] AFRICANS
GEOGRAPHY & POLITICS
Wroclaw, Poland

So: East European Accessions, vol. 6, no. 4, March 1957



PIECHOWSKA, Wanda; PILAWSKI, Andrzej, dr.

Effect of roentgen rays on the size of peripheral red blood cells in mice. Acta physiol. Pol. 16 no.2:235-238 Mr-Ap'65.

1. Katedra Fizyki Lekarskiej Akademii Medycznej w Poznaniu (Kierownik: dr. A. Pilawski).

POLAND/Electricity - Dielectrics

Abs Jour : Ref Zhur - Fizika, No 12, 1958, No 27773

Author : Bilawski A.
Inst : Institute of Experimental Physics, The University, Poznan, Poland.
Title : Investigation of Ferroelectrics by Temperature Measurements.

Orig Pub : Bull. Acad. polon. sci. Ser. sci. math., astron. et phys., 1958, 6, No 1, 61-65

Abstract : An investigation is made of the temperature dependence of the temperature difference ΔT between the temperature of a ceramic specimen $BaTiO_3$ and the surrounding medium, occurring under the influence of an alternating field of 50-cycle frequency. ΔT has a maximum at 110°C, and a minimum at the Curie point, 120° C. A constant field acting jointly with an alternating field reduces ΔT at temperatures below the Curie point and increases them above the Curie point. The effect of the bias field on ΔT changes in accordance with the temperature interval: ΔT increases at stronger intensities of the constant field below 60°C, ΔT has a minimum

Card : 1/2

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537.226.2

3760. INVESTIGATION OF FERROELECTRICS BY TEMPERATURE MEASUREMENT. A.Pinczuk.
Bull. Acad. Polon. Sci. Sér. Sci. astron. phys., Vol. 6, No. 1, 61-5 (1958).

The power loss of a barium titanate ceramic sample subject to a 50 c/s field of 2000 V/cm was investigated by measuring the temperature rise ΔT produced in the sample. The variation of ΔT with temperature shows a peak of 15 deg C at about 110°C followed by a minimum of 8 deg C at the Curie point at 120°C. The peak is suppressed when a large static bias field is applied. Increasing bias field produces a fall in ΔT at low temperatures and an almost linear increase at high temperatures, probably due to an increase in conductivity. At temperatures near 100°C, ΔT has a minimum value for a particular bias field.

R.C.Kell

TWARDOSZ, Wladyslaw; PILAWSKI, A.

Photophlethysmographic studies in Raynaud's disease. Polski przegl. chir. 28 no.7:681-683 July 56.

1. Z.I. Kliniki Chirurgicznej A.M. w Poznaniu Kierownik: prof. dr. St. Nowicki Z Zakladu Fizyki Lekarskiej A.M. w Poznaniu Kierownik: z prof. A. Pilawski, Poznan, ul. Dluga 1.
(RAYNAUD'S DISEASE, diagnosis,
photophlethysmography (Pol))
(PLETHYSMOGRAPHY, in various diseases,
photophlethysmography in Raynaud's dis. (Pol))

PILAWSKI, A.; TWARDOSZ, Wl.; JASINSKI, K.

Clinical applications of photoplethysmography. Polski tygod. lek. 11 no.16:673-679 16 Apr 56.

1. Z Zakladu Fizyki Lekarskiej AM w Poznaniu, kier. z. prof. A. Pilawski z I Kliniki Chirur. AM w Pozn., kier. prof. dr. St. Nowicki; z I Kliniki Chorob Wewn. AM w Poznaniu; kier. prof. dr. W. Kwasniewski, Poznan, ul. Dluga 1/2.

(PLETHYSMOGRAPHY,
photoplethysmography (Pol))

PILAWSKI, B.

Examples of the calculation of the payment for rationalization projects. p. 80.

PRZEGLAD WYNALAZCZOSCI. (Naczelna Organizacja Techniczna i Urzed Patentory) Warszawa, Poland. Vol. 6, no. 3, Mar. 1959.

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

Uncl.

PILAWSKI, B.

Official duties and technical progress. p. 485.

MECHANIK. (Stowarzyszenie Inzynierow i Techników Mechaników Polskich)
Warszawa, Poland. Vol. 31, no. 10, Oct. 1958.

Monthly list of East European Accessions Index, (EEAI), LC, Vol. 8, no. 6,
June 1959
uncla.

PILAWSKI, Stanislaw

Species of spiders new for the fauna of Lower Silesia.
Przegl zoolog no. 1:43-52 '63.

1. Muzeum Zoologiczne, Instytut Zoologiczny, Uniwersytet, Wroclaw.

PILAWSKI, Zbigniew

Endocrine activity of the ovaries after removal of the uterus.
Gin.polska 31 no.2:225-237 Mr-Ap '60.

1. Z Kliniki Poloznictwa i Chorob Kobiecych P.A.M. w Szczecinie.
Kierownik: prof.dr med. T. Zwolinski.
(HYSTERECTOMY)
(OVARIES physiol.)

PILAWSKI, Zbigniew; BAJOREK, Jadwiga

Developmental anomalies in twins. Pol. tyg. lek. 18 no.41:1519-1521 7 O '63.

1. Z Kliniki Poloznictwa i Chorob Kobiecych Pom. AM w Szczecinie; kierownik: prof. dr med. Tadeusz Zwolinski.
(DISEASES IN TWINS) (ABNORMALITIES)
(MONSTERS)

PILAWSKI, Zbigniew

Utero-gluteal fistula. Gin. polska 32 no.3:345-347 '61.

1. Z Kliniki Poloznictwa i Chorob Kobiecych Pomorskiej AM w Szcze-cinie Dyrektor: prof. dr T. Zwolinski
(UTERUS dis)
(FISTULA case reports)
(BUTTOCKS dis)

PILCH-SAWICKA, Wanda; PILAWSKI, Zbigniew

Colposcopy in the management of premature labor. Gin.polska 29 no.1:51-58 Jan-Feb 58.

1. Z Kliniki Poloznictwa i Chorob Kobiecych Pomorskiej A.M. w Szczecinie. Kierownik: prof. dr med. T. Zwolinski. Adres: Hrubieszow, ul. Dzierzynskiego 25.
(LABOR,
premature, value of colposcopy in management, statist. (Pol))

PILAWSKI, Zbigniew

Spontaneous delivery of mature infant through aperture in placenta previa. Gin. polska 28 no.2:189-191 Mar-Apr 57.

1. Z Kliniki Poloznictwa i Chorob Kobiecych Pomorskiej A.M. w Szczecinie Kierownik: prof. dr. T. Zwolinski. Adres: Szczecin, ul. M. Fornalskiej.

(DELIVERY
spontaneous, through aperture in placenta previa (Pol))
(PLACENTA PREVIA, case reports
spontaneous delivery through aperture in placenta previa (Pol))

PILAYEV, I.; GALKO, V.

Committee on mass invention and innovation among workers. Sov. profsoiuzy 3 no.7:41-43 Jl'55. (MLRA 8:10)

1. Predsedatel' zavodskogo komiteta Bakinskogo neftepererabatyvayushchego zavoda (for Pilayev) 2. Starshiy inzhener otdela ratsionalizatsii i izobretatel'stva (for Galko)
(Baku--Efficiency, Industrial)

PILAYEVA, L.P.

7

5128. STUDY OF VISCOSITY-TEMPERATURE PROPERTIES OF PETROLEUM FRACTIONS AND INFLUENCE OF AROMATIC HYDROCARBONS ON THEM. Kuliev, A.M., Levshina, A.M., Pilaeva, L.P. (Trud. Azerbaidzh. Univ., Ser. Khim. (Proc. Azerbaidzh. Univ., Ser. Chem.), 1954, 3, 70-87; abstr. in Ref. Zh. Khim. (Ref. J. Chem., Moscow), 1956, (17), 55541). Determination of the physical and chemical properties of twenty degree fractions (boiling in the 300-480°C range) of Balakhany lubricant and heavy petroleums, shows that an improvement in viscosity-temperature and other characteristics is obtained by removal of the aromatic hydrocarbons.

PILC, Aleksander; KUROWSKI, Stanislaw

Danger of explosion of inflammable mixtures of vapors and gases with air. X. Determination of the inflammation temperature as a measurement of the activation energy of the burning of inflammable mixtures of limit density. Przem chem 41 no.6:324-328 Je '62.

1. Zaklad Technologiczny, Instytut Chemii Ogolnej, Warszawa.

P.T.A.

Chemistry + Chemical Technology

721 547.422.22 931 614.8

Pile A., Ostrzycki A. Ethylene Oxide

Tlenek etylenu. Bezpieczeństwo i Higiena Pracy No. 11 12, 1950 pp. 4 13 6 f. 4 tab.

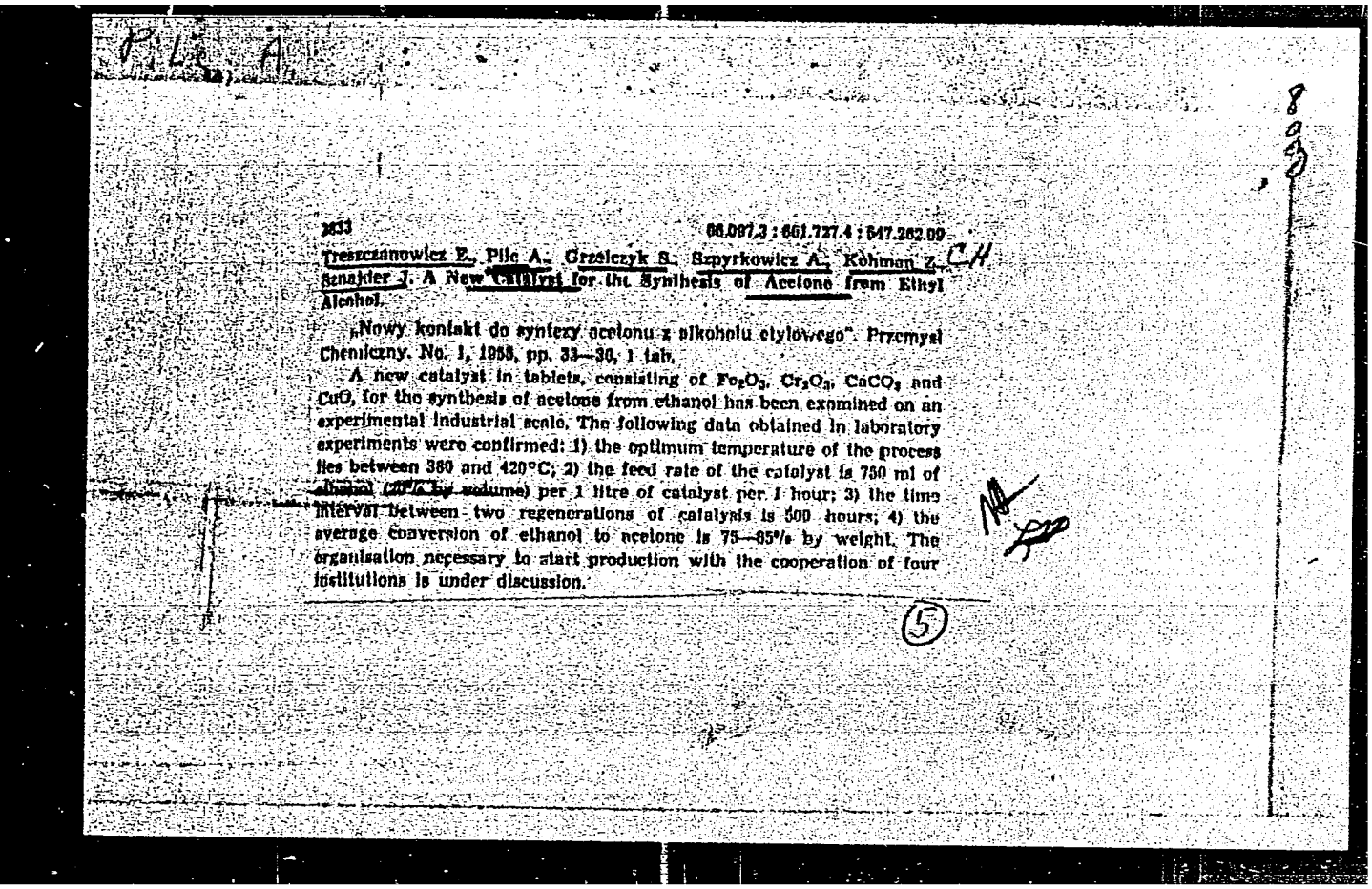
The production process and methods of storing ethylene oxide involve great danger owing to toxicant properties and its highly explosive character. Delineation of this danger and of methods and security measures to be employed in handling ethylene oxide. Physical and chemical properties with particular emphasis on dangerous elements or those which are able to cause danger of explosion. Polymerization process. Toxicant properties. Methods of production. Use of ethylene oxide for disinfection.

CA

/10

Phenyl ether from phenoxides and chlorobenzene A. Pilc, H. Osmolski, and L. Rybacki. *Przemysl Chem.* 6, 104-7(1950). - An increased yield of Ph_2O from PhOK and PhCl was obtained when the dehydration of the PhOK was effected by distn. under atm. pressure with an excess of PhOH. An increased yield can also be obtained by replacing part of the PhOK with PhONa, which can replace all the PhOK if an inorg. K salt is present. A simple and economical method is suggested for handling the by-products of the reaction. Frank Gonet

1952



2633 66.097.3 : 661.727.4 : 547.262.09

Treszczanowicz E., Pilc A., Grzelczyk S., Szpyrkowicz A., Kohman Z., Sznajder J. A New Catalyst for the Synthesis of Acetone from Ethyl Alcohol.

„Nowy kontakt do syntezy acetonu z alkoholu etylowego". Przemysł Chemiczny. No. 1, 1958, pp. 33—36, 1 tab.

A new catalyst in tablets, consisting of Fe_2O_3, Cr_2O_3, $CaCO_3$ and CuO, for the synthesis of acetone from ethanol has been examined on an experimental industrial scale. The following data obtained in laboratory experiments were confirmed: 1) the optimum temperature of the process lies between 380 and 420°C; 2) the feed rate of the catalyst is 750 ml of ethanol (96% by volume) per 1 litre of catalyst per 1 hour; 3) the time interval between two regenerations of catalysts is 500 hours; 4) the average conversion of ethanol to acetone is 75—85% by weight. The organisation necessary to start production with the cooperation of four institutions is under discussion.

(5)

PILC, A.

614.838

The Danger of Explosion of Inflammable Mixtures of Vapours or Gases with Air.

„Niebezpieczeństwo wybuchów mieszanin palnych par i gazów z powietrzem". Przemysł Chemiczny. No. 7, 1955, pp. 359—363, 4 figs.; 3 tabs.

The influence of various factors on the results of determining ignition temperature is discussed. The direct relation between the theoretical temperature of combustion of the mixure, of composition corresponding to the lower limit of explosibility, and the temperature of ignition (determined by the method of heating independently inflammable components and air) has been found to be: $\frac{\text{temperature of combustion}}{\text{temperature of ignition}} \simeq 2$. Hydrogen is an exception. The author believes that this formula can be widely applied in theory and practice.

PILC, A.

3

POL.

Obtaining of pure *N*-methylaniline. A. Pilc and J. Rybacki. *Przemysł Chem.* 8, 529–32 (1952) (English summary).—The conditions for obtaining the highest concn. of PhNHMe (I) have been detd. Expts. were carried out in a steel autoclave provided with stirrer and oil jacket. $PhNH_2$ (II), MeOH, and concd. H_2SO_4 were heated in the autoclave with vigorous stirring 10 *hrs.* at 195–200°; the stirring as well as the 10 *hrs.* heating are the important factors to obtain good yields. One mole II was used in all expts., while the amt. of H_2SO_4 varied within a 0.1–0.2 mole- and MeOH within a 1–1.5 mole-range. The best yields (505 g. of product contg. 40% I and 9% II, from 724 g. reactants) was obtained with the mole proportion $PhNH_2$-MeOH-H_2SO_4 = 1:1.25:0.1. The sepn. of I, II, and $PhNMe_2$ was based on the difference of the solubilities of their sulfates in MeOH acidified with concd. H_2SO_4. MeOH was added stepwise to the mixt. of the sulfates; the sulfate of II ppts. first and then the sulfate of I (70% of the theoretical yield). The sepn. of II from I with pure MeOH is impossible. The sulfate of I contains 2 moles I and 1 mole H_2SO_4.

Gene A. Woźny

[redacted], Aleksander, [redacted]

[redacted] survey of the works of the Technological Laboratory of the [redacted] Institute of General Chemistry. Przem Chem 42 no.1, [redacted]

PILC, A.

(2)

Chemical Abstracts
May 25, 1954
Organic Chemistry

Preparation of melamine from dicyandiamide. A. Pilc and S. Domanusowa. *Przemyl Chem.* 31(8), 256–62 (1952).—Some of the most frequently used methods of prepg. melamine from dicyandiamide have been examd. by expt., and a new method of prepg. tech. melamine (more than 99% pure) in a simple app. is presented. 18 references.
Frank Gonet

P. T. N.

Chemistry & Chemical Technology

7

547.539.2 547.562.1-13 547.621.07

334

Pilc A Rybacki L and Osmolski H **Research on Preparation of Diphenyl Ether from Phenolates and Chlorobenzene.**

Badania nad otrzymywaniem eteru dwufenylowego z fenolanow i chlorobenzenu Przemysl Chemiczny No 4. 1950. pp 194 197. 1 fig

To obtain a high yield in diphenyl ether preparation from phenolates and chlorobenzene it is necessary previously to dehydrate potassium phenolate by distillation A yield similar to those established in the literature was obtained by using chlorobenzene and potassium phenolate under pressure of a few atmospheres. and a simple method was worked out for exploitation of the post-reaction mixture Part of the potassium phenolate can be supplanted by sodium phenolate but only in the presence of an inorganic sodium salt

C4

7

Double-distilled water used in the preparation of normal solutions for manganometry V. Pik. *Tech. Hlídka Kožeľužská* 22, No. 3, 30-8(1947). (*Chimie & industrie* 58, 160 1(1947).) Solns. prepd. with pure $KMnO_4$ dissolved in double-distd. water are very stable. A. P.-C.

A S M - S L A METALLURGICAL LITERATURE CLASSIFICATION

The oxidation of aqueous solutions by potassium permanganate according to the improved Kubel and Schulz method. Vladimir [illegible]. *Tech. Hlidka Kozeluzska* 23 (1948). Boiling a sample of water with 0.01 N $KMnO_4$ for 10 min. in an alk. medium will give the consumption of the $KMnO_4$ by org. substances even in the presence of Cl. Except for the presence of more than 500 mg. NH_4Cl per l. the $KMnO_4$ used by chlorides can be ignored. The method can be used for sea water, brine, etc.

Frank Maresh

KUBICA, Jan; RYBACKI, Lucjan; LESZCZYNSKI, Zbigniew; PILC, Aleksander

Dehydration of maleic acid from its aqueous solutions to maleic anhydride of high purity. Przem chem 41 no.8:458-461 Ag '62.

1. Zaklad Technologiczny, Instytut Chemii Ogolnej, Warszawa.

PILC, A.

The danger of explosion of flammable mixtures of vapors and gases with air. IV. Factors influencing the values for the lower limits of explosivity of the individual combustible compounds, and the approximate calculations of such limits. A. Pilc (Zakład Technol. Inst. Chem. Ogóln., Poland). *Przemysł Chem.* 35, 433–42(1956); cf. *C.A.* 52, 21108e.—The lower limits of explosibility were detd. for $(CN)_2$, NH_3, C_6H_6, toluene, CH_4, CO, C_2H_2, H_2, n-C_4H_{10}, n-C_5H_{12}, propylene, Et_2O, n-C_6H_{14}, ethylene oxide, cyclohexane, C_3H_6, heptane, C_2H_6, C_2H_2, H_2S, and CS_2. Also various alcs., as a function of several factors, like temp., pressure, moisture in the air, and equations, were derived on the base of older known equations for the approx. calcns. of the lower explosibility limits. The new formulas contain the flame point; they give much better values than do the older formulas, especially for gas mixts. warmer than room temp. 18 references. Werner Jacobson

4E3d

2 May

5

P, LC, A

2

Prevention of explosions of mixtures of inflammable vapors or gases with air, by using neutral gases (as diluents). A. Pilc (Inst. Chem., Ogólnej, Poland). *Przemysl Chem.* [illegible] (English summary); cf. *C.A.* 52, 2110c.—Formulas are worked out to det. theoretically the amt. of N which has to be added to an explosive mixture to render it safe. They are in agreement with expts. L. G. Manitius

PILC, A

Danger of explosion of flammable mixtures of vapors and gases with air. VI. Kinetics of combustion occurring spontaneously at atmospheric pressure under conditions which are close to limiting concentrations. Aleksander Pilc (Inst. Chem. Ogolnej, Warsaw). *Przemysl Chem.* 37, 529-37(1958)(English summary); cf. *C.A.* 52, 2140e. The Arrhenius equation relating to the rate of chem. reactions was converted so as to obtain "temp." velocity (i.e. the value of temp. changes in a unit time) instead of "concn." velocity. Under these conditions the parameter corresponding to the actual concn. of O (as the 2nd component) disappears from the equation and the coeffs. of the equation lose the characteristics of individual flammable components (being common for some of these components). P. shows that there is a quant. relation between the following parameters: the temp. of flammability, the energy of activation, the min. combustion temp., and the lower limit of explosibility. The results described in previous papers are explained and somewhat corrected.

F. J. Hendel

P/4 c) A

7 4

Danger of explosion of flammable mixtures of vapors
and gases with air. II. Terminology used and the rela-
tions between and among the properties characteristic for
this danger. A. Pilc (Inst. Chem. Ogólnej, Warsaw).
Przemysl Chem. [illegible](1955); cf. [illegible], 11, 20(1955).
—The nomenclature used is explained, and empirical for-
mulas are derived to det. the degree of danger of explosion.
They are to be used only in cases where accurate exptl. data
are lacking. III. Ignition temperature and the minimum
theoretical combustion temperature. *Ibid.* 359-63.—With
known and well-investigated explosion reactions, such as
$2H_2 + O_2 = 2H_2O$, or $H_2 + Cl_2 = 2HCl$, the bases are for
the formulas presented in part II. Discussed are the various
factors which influence the ignition temp., and why the
actual combustion temp. differs from the theoretical one.
By heating various mixts. of gas and air the ignition limits
can be found; in the various technically interesting gas
mixts. the temp. of combustion is about twice as high as the
ignition temp. This statement does not hold true for mixts.
where free H is involved. Werner [illegible]

CZECHOSLOVAKIA / Chemical Technology, Chemical Products and Their H-35
Application. Leather, Fur, Gelatin. Tanning
Materials. Industrial Proteins.

Abs Jour : Ref Zhur - Khimiya, No 5, 1959, No. 17981

Author : Pilc, V.
Inst : Not given
Title : Washing and Removal of Sulfoesters in the Manufacture of Greasing Substances for Leather

Orig Pub : Kazarstvi, 1957, 7, No 6, 154-157

Abstract : Sulfonation is accomplished by the addition of 92 - 94% H_2SO_4 to fatty substances in the form of a fine stream while cooling and mixing in the course of 3 hours. Sulfonation of fish and vegetable oils is conducted at 15 - 25°. Mixing is continued after all of the acid has been added while temperature is maintained at th same level. The formed esters are washed with the salt

Card 1/3

CZECHOSLOVAKIA / Chemical Technology, Chemical Products and Their Application. Leather, Fur, Gelatin. Tanning Materials. Industrial Proteins. H-35

Abs Jour : Ref Zhur - Khimiya, No 5, 1959, No. 17921

solution in order to remove the excess of acid. The formed emulsion is skimmed and is allowed to settle out until the next day. After the decantation of wash water, sulfoesters are neutralized with ammonia until pH of the 10% emulsion reaches 6.2 - 7.0 level. In the manufacture of sulfonated oils, washing and separation of sulfoesters are important operations. If temperature employed in the washing operation is too high, this leads to the reversing generation of sulfuric acid. When temperature employed in washing is low ($<35^{\circ}$) and is further allowed to decline during the settling period, the separation of sulfoesters proceeds poorly and with greater quantity of wash water and sulfuric acid remaining in it. The consumption of ammonia required for neutralization ...

Card 2/3

H - 1721

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012408

CZECHOSLOVAKIA / Chemical Technology, Chemical Products and Their Application. Leather, Fur, Gelatin. Tanning Materials. Industrial Proteins. H-35

Abs Jour : Ref Zhur - Khimiya, No 5, 1959, No. 17981

therefore, increased and the content of fatty acids in sulfonated oil is decreased. The washing and settling operations can be regulated with the aid of thermostatic instruments, that will ascertain high yield of sulfoesters. Such thermostatic instruments are of particular importance in the manufacture of the new types of sulfonated oils (oxidized paraffin, oxidized animal fats and vegetable oils and mixtures thereof) which contain chemically modified fats or non-fatty substances and require closer temperature control in their settling. The article describes such a control instrument. -- M. Lyuksemburg

Card 3/3

PILC, ALEKSANDER

Danger of explosion of flammable mixtures of vapors and gases with air. VI. Kinetics of combustion occurring spontaneously at atmospheric pressure under conditions which are close to limiting concentrations. Aleksander Pilc (Inst. Chem. Ogólnej, Warsaw). *Przemysł Chem.* 37, 629-37(1958)(English summary); cf. *C.A.* 52, 21108e.—The Arrhenius equation relating to the rate of chem. reactions was converted so as to obtain "temp." velocity (i.e. the value of temp. changes in a unit time) instead of "concn." velocity. Under these conditions the parameter corresponding to the actual concn. of O (as the 2nd component) disappears from the equation and the coeffs. of the equation lose the characteristics of individual flammable components (being common for some of these components). P. shows that there is a quant. relation between the following parameters: the temp. of flammability, the energy of activation, the min. combustion temp., and the lower limit of explosibility. The results described in previous papers are explained and somewhat corrected.

F. J. Hendel

POLAND/Chemical Technology. Chemical Products and Their Application. Part 1. - afety and Sanitation Techniques. H

Abs Jour: Ref. Zhurnal Khimiya, No 21, 1958, 71316.

Author : A. Pilc.
Inst :
Title : Explosion Danger of Mixtures of Combustible Vapors and Gases with Air. IV. Factors Influencing Results of Lower Explosiveness Border Determination of Combustible Components and Methods of Determination of that Border.

Orig Pub: Przem. chem., 1956, 12, No. 8, 433-442.

Abstract: The influence of various factors on the lower explosiveness border (EB) of mixtures of gases or vapors with air is discussed. Experimental data are com-

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POLAND/Chemical Technology. Chemical Products and Their Application. Part 1. - Safety and Sanitation Techniques. H

Abs Jour: Ref. Zhurnal Khimiya, No 21, 1958, 71316.

pared with data computed with equations derived taking into consideration the flash points of gases or vapors. The value of the lower EB is the lower, the greater the diameter of the explosion chamber is, and it depends also on the place, at which the source of ignition is introduced. The O_2 content in air does not produce any noticeable effect on the lower EB, but the upper EB is noticeably lowered, if the O_2 content in air was below 21%. At a temperature rise of the gas mixture, the lower EB becomes lower and the upper EB becomes higher. The range between the EB-s becomes narrower, if the pressure was increased to several

Card : 2/3

16

H-6

POLAND/Chemical Technology - Chemical Products and Their Application, Part 1. - Safety and Sanitation Techniques.

Abs Jour : Ref Zhur - Khimiya, No 14, 1958, 47296

Author : A. Pilc
Inst : -
Title : Explosion Danger of Mixtures of Combustible Vapors or Gases with Air. II. Terminology and Approximate Dependence Among Peculiarities Characterizing That Danger. III. Ignition Temperature and Theoretical Minimum Combustion Temperature.

Orig Pub : Przem. chem., 1955, 11, No 7, 357-359

Abstract : See report I in RZhKhim, 1955, 57460.

Card 1/1

HIL, A.

"The danger of explosion of mixtures of vapors and gases with air. IV. Factors influencing the results of the determination of the lower limits of explosiveness of inflammable component parts and the methods of calculating the approximate values of these limits."

... 433 (Przemysl Chemiczny) Vol. 12, no. 8, Aug. 1956
Warsaw, Poland

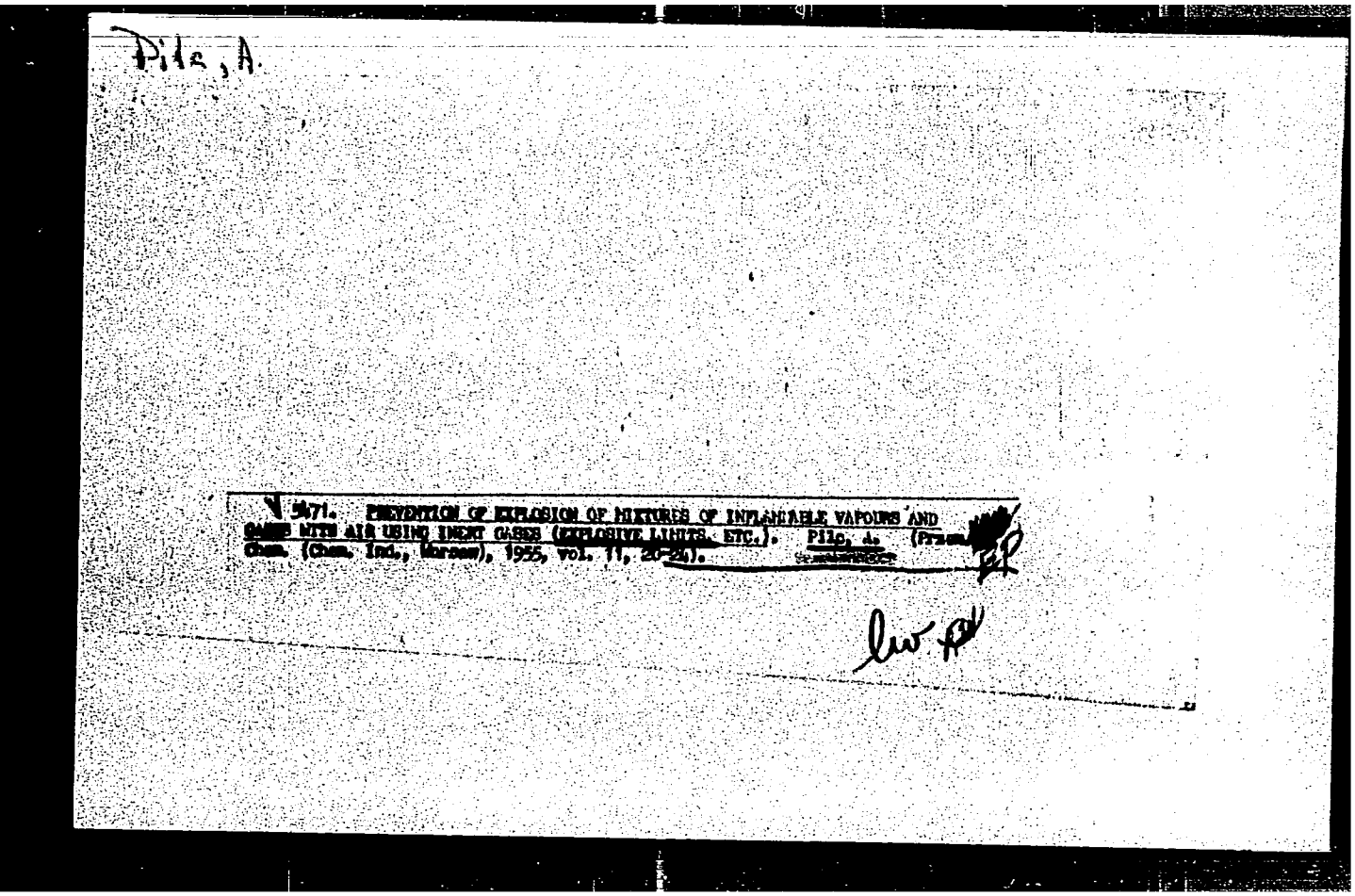
SO: Monthly Index of East European accessions (EEAI) LC, Vol. 7, no. 4, April 1958

Pilc A.

Pilc A. "Research on Preparation of Diphenyl Ether from Phenolates and Chlorobenzene" (Badania nad otrzymywaniem eteru dwufenylowego z fenolanow i chlorobenzenu). Przemysl Chemiczny, No 4, 1950, pp. 194-197, 1 fig.

To obtain a high yield in diphenyl ether preparation from phenolates and chlorobenzene--it is necessary previously to dehydrate potassium phenolate by distillation. A yield similar to those established in the literature was obtained by using chlorobenzene and potassium phenolate under pressure of a few atmospheres, and a simple method was worked out for exploitation of the post-reaction mixture. Part of the potassium phenolate can be supplanted by sodium phenolate, but only in the presence of an inorganic sodium salt.

SO: Polish Technical Abstracts No. 2, 1951



Pilo, A.

5471. PREVENTION OF EXPLOSION OF MIXTURES OF INFLAMMABLE VAPOURS AND GASES WITH AIR USING INERT GASES (EXPLOSIVE LIMITS, ETC.). Pilo, A. (From Chem. (Chem. Ind., Warsaw), 1955, vol. 11, 20-26).

FILC, Aleksander; STRZELECKI, Janusz

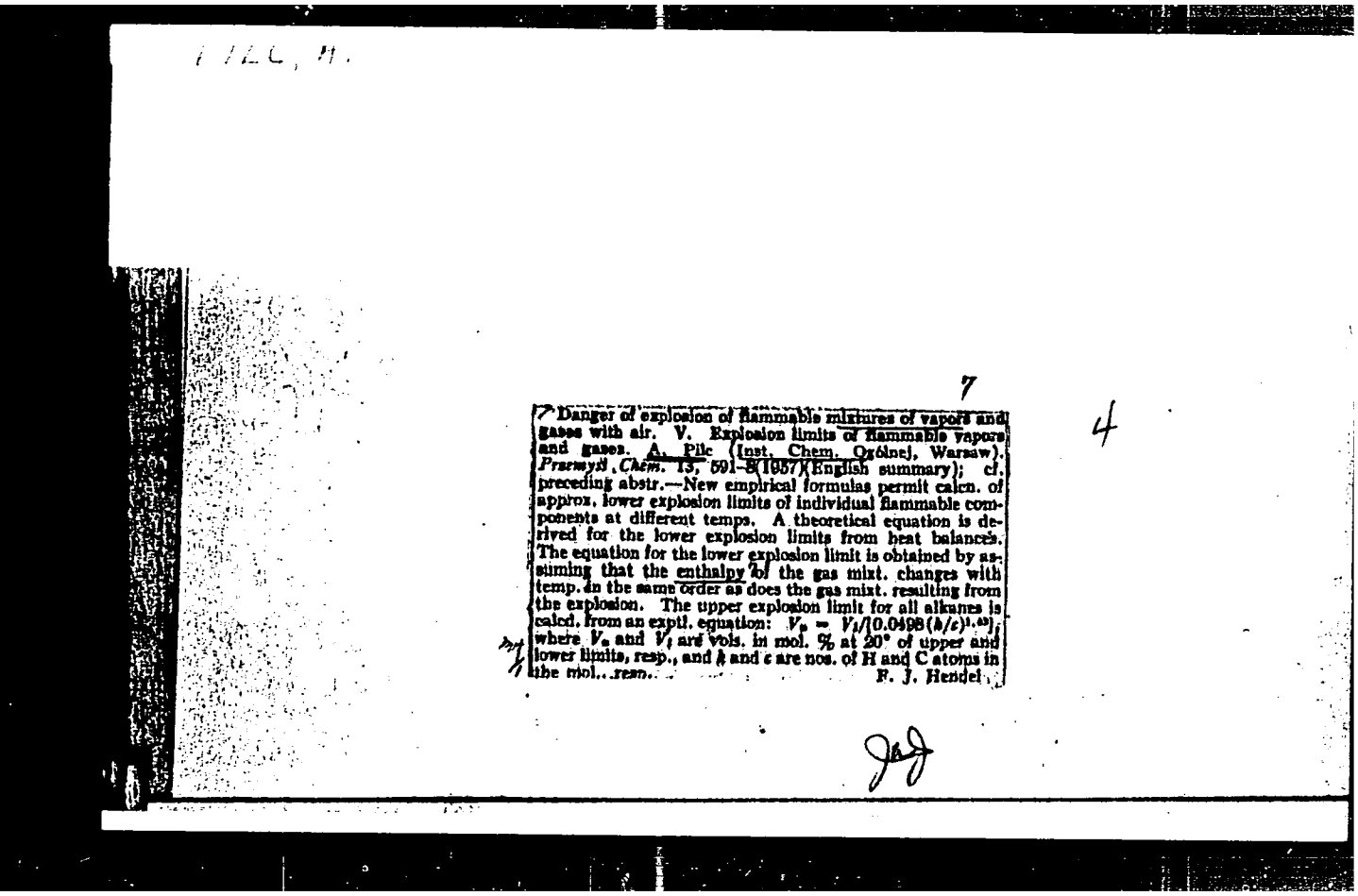
Danger of explosion of inflammable mixtures of vapors and gases with air. Pt. 9. Determination of the maximal real burning temperature of inflammable border density mixtures. Przem. chem. 41 no.5:243-250. My '62.

1. Zaklad Technologiczny, Instytut Chemii Ogolnej, Warszawa.

PILC, Aleksander; PRZETAKIEWICZ, Magdalena

The danger of expolsion of inflammable mixtures of vapors and gases with air. VIII. On the temperature bound reaction rate of combustion under border conditions; continuation. Przem chem 39 no.7:452-455 Jl '60.

1. Zaklad Technologiczny Instytutu Chemii Ogolnej, Warszawa



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Danger of explosion of flammable mixtures of vapors and gases with air. V. Explosion limits of flammable vapors and gases. A. Pilc (Inst. Chem. Ogólnej, Warsaw). *Przemysł. Chem.* 13, 591–8 (1957) (English summary); cf. preceding abstr.—New empirical formulas permit calcn. of approx. lower explosion limits of individual flammable components at different temps. A theoretical equation is derived for the lower explosion limits from heat balances. The equation for the lower explosion limit is obtained by assuming that the enthalpy of the gas mixt. changes with temp. in the same order as does the gas mixt. resulting from the explosion. The upper explosion limit for all alkanes is calcd. from an expti. equation: $V_o = V_l/[0.0498(b/c)^{1.43}]$, where V_o and V_l are vols. in mol. % at 20° of upper and lower limits, resp., and b and c are nos. of H and C atoms in the mol. resp.

F. J. Hendel

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