

P/0046/63/008/012/0787/0802

ACCESSION NR: AP4016298

AUTHOR: Graffstein, A. (Graffshiteyn, Andzhey); Wilhelmi, Z. (Vil'gel'mi, Zdzislav)

TITLE: "AGNES - the mechanical selector of resonance neutrons." Part II

SOURCE: Nukleonika, v. 8, no. 12, 1963, 787-802

TOPIC TAGS: resonance neutrons selector, mechanical chopper, rotary chopper selector

ABSTRACT: Following Part I of the article, which described the development and design stages leading to the selector "Agnes" (Graffstein, A., Wilhelmi, Z.: Nukleonika 8, 715, 1963), this Part II deals with its construction and operation. The bunching interrupter or chopper is of the mechanical, motor type and consists of a rotating disc with four slits, two collimators, a housing mounted on a base, an actuator and other auxiliaries. Two important problems in connection with the rotor design are: 1) limiting its precession during the passage through critical speed, and 2) maintaining the vacuum inside the container which encloses the rotor. A buffer and a damper reduce the effect of precession, the latter acts alone at speeds above critical. The vacuum around the revolving structure is secured

Card 1/57

ACCESSION NR: AP4016298

through a system of throttle seals of the grease-resistant resinous ZIMMER type. Both the inlet and the outlet collimator are built in the form of iron rods, each consisting of two sections with cut-outs making up the respective slit. Both collimators can be adjusted around their vertical and horizontal axes independently of the rotor container. The auxiliary apparatus in the selector unit is functionally subdivided into the following groups: 1) the actuator system, 2) the cooling system for the throttle valves and the rotor of the actuator, 3) the vacuum and the vacuum measuring system, 4) the rotor bearings lubrication system, and 5) the system for transporting the test specimen. The neutron detection and analysis is carried out by instrumentation designed by W. Ratyn'ski (Biuletyn WAT 8, 121, 1959). It consists of three sets of proportional counters of the SMM-5 type filled with boron trifluoride 96% concentrated, and an amplifier - pulse train shaping circuit. The results are plotted in the form of spectrum curves as is shown here for indium and palladium. Since its installation at the Instytut Badan' Jadrowych (Institute of Nuclear Research) in Warsaw, the selector "Agnes" has been working for 2000 hrs at below 10,000 revolutions per minute. During the operation it was found necessary to exchange the 144-channel analyzer for a 256-channel one of better design. All components worked satisfactorily, only the brushes and the upper bearing of the actuator have to be changed after about 400 hours. Some elastic

Card 2/57

ACCESSION NR: AP4016298

deformation was detected in the rotor discs at speeds above 6500 rpm. Therefore, the operating speed was limited to 10,000 rpm. The effect on the design parameters is insignificant, since the resolving power of the selector is limited by the neutron transit time through the thickness of the detector.

"The authors wish to thank their colleagues at the Department IA of the Institute who were actively helpful in the building of this selector. Expressions of gratitude go also to the Transportation Equipment Plant "Grochow" for making the special motor and to the Transportation Equipment Plant "Zhechow" for making the duraluminum discs." Original article contains 17 diagrams.

ASSOCIATION: Graffstein, Andrzej - Instytut badan' jadowych (Institute of Nuclear Research), Warsaw-S'wierk. Wilhelmi, Zdzislaw - Katedra fizyki atomowego jadra, Uniwersytet Warszawski (Chair of Nuclear Physics, Warsaw University), Warsaw.

SUBMITTED: 13Aug63

DATE ACQ: 19Feb64

ENCL: 02

SUB CODE: NS, SD

NO REF SOV: 001

OTHER: 006

Card 3/53

RONDIO, J.; WILHELMI, Z.

On some possibilities of determining the spin of a "negative level."  
Acta physica Pol 23 no.2:221-223 F '63.

1. Department (IA) of Atomic Nucleus Physics, Institute of Nuclear  
Research, Warsaw, and Department of Atomic Nucleus Physics,  
University, Warsaw.

WILHEIMI, Zdzislaw

Experimental nuclear physics of the Warsaw center during the years  
1945-1964. Postępy fizyki 15 no.4:405-422 '64.

1. Department of Atomic Nuclear Physics, University, Warsaw,  
and Department of Nuclear Reactions, Institute of Nuclear  
Research, Warsaw.

10

WILHELMS, A.

ca

The 1-thiocyanic esters of glucose and cellobiose. Adrienne Wilhelms. *Magyar Biol. Kutató Intézet Munkái* 13, 325-45(1941).—Acetobromoglucose was treated at room temp. with KSCN to solve the problem why aceto- and bromosaccharides with AgSCN give mustard oil derivs. and 6-tosylglucose derivs. with KSCN give thiocyanic compounds. Tetraacetyl-salicin bromide and AgSCN gave in the presence of dry xylene *o*-(tetraacetylglucosidoxy)benzyl thiocyanate (I), m. 135°,  $[\alpha]_D^{20}$  49.8° (CHCl<sub>3</sub>). Triacetyl-4-thiocyano-1-bromo- $\alpha$ -glucose and dry Ag<sub>2</sub>CO<sub>3</sub> with abs. MeOH gave triacetyl-4-thiocyano- $\beta$ -methylglucoside (II), m. 135°. On treating an acetone soln. of KSCN with acetobromoglucose and evapng. the product, snow-white needles of tetraacetyl-1-thiocyano- $\beta$ -glucose (III), m. 132°,  $[\alpha]_D^{20}$  -21.8° (CHCl<sub>3</sub>), are formed. To prove the presence of the thiocyanate group in the mol. of III various reactions were made. With abs. EtOH was obtained  $\alpha$ -glucose which gave with NaOAc and anhyd. AcOH  $\beta$ -pentaacetylglucose. Treatment of III with NaOMe led to octaacetyl-1-isothiothrehalose and the reaction of III with abs. MeOH and NH<sub>3</sub> led to octaacetyl-1-glucosylamine. Heating of III in an Alderhalden app. at 141° isomerized it to tetraacetyl-1-isothiocyanoglucose (IV), m. 112-113°, and  $[\alpha]_D^{20}$  1.0° (CHCl<sub>3</sub>). The presence of a mustard oil group in IV was proved by the following reactions: (a) treatment of IV with NH<sub>3</sub> and abs. MeOH gave glucose-1-thiocarbamide; (b) the reaction of EtOH and IV led to tetraacetylglucose-1-ethylthiourethan; (c) NaOMe and IV gave tetraacetylglucose-1-methylthiourethan; and (d) abs. MeOH and IV reacted to give tetraacetylglucose-1-methylthiourethan. Treatment of tetraacetylglucose-1-methylthiourethan. Treatment of dry acetobromocellobiose with KSCN in the presence of dry acetone gave heptaacetyl-1-isothiocyanocellobiose (V), m. 205-6°,  $[\alpha]_D^{20}$  -8.0° (CHCl<sub>3</sub>). The product contains some solvent which can be removed by drying *in vacuo* and fill the m. p. decreases to 208-9°. The reaction of V and EtOH gave rosette-like crystals of heptaacetylcellobiose-1-ethylthiourethan (VI), m. 100-8°,  $[\alpha]_D^{20}$  30.7° (CHCl<sub>3</sub>), and the same treatment with MeOH led to heptaacetylcellobiose-1-methylthiourethan (VII), m. 207-9°,  $[\alpha]_D^{20}$  12.8° (CHCl<sub>3</sub>). The acetothiocyanoglucose obtained from acetobromoglucose with KSCN is not identical with the mustard oil deriv. described by Fischer (since it contains normal thiocyanate group) but can be transformed into it by treatment at 140°. The thiocyanate group tends to transformation if it is located on the C atom which has also the lactol chain. S. S. de Finály

ASS. S. LA METALLURGICAL LITERATURE CLASSIFICATION

98881 GAC QM 111

GROUP #

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Wilhelms, A.K.

Distr: 4E3d

Simple synthesis of pentacene. V. Bruckner, A. Kaczag, Wilhelms, K. Kormendy, M. Meszaros, and J. Tomasz (L. Eötvös Univ., Budapest, Hung.). *Tetrahedron Letters* 1960, No. 1, 6-8.—Pentacene-6,13-quinone [50 g., obtained in 78% yield from cyclohexane-1,4-dione and  $o\text{-C}_6\text{H}_4(\text{CHO})_2$  according to Ried and Anthofer (CA 48, 12731b)] refluxed 48 hrs. with 50 g. Al in 1000 ml.  $\text{C}_6\text{H}_{11}\text{OH}$  gave 21-3 g. pentacene, purified without loss by washing with  $\text{C}_6\text{H}_{11}\text{OH}$ , hot AcOH, concd. HCl and  $\text{H}_2\text{O}$ . It was assumed that similar redn. of quinone or diquinones with Al alcoholates may be successfully employed for the prepn. of the corresponding hydrocarbons.

C. R. Addman

7  
JJ(NB)  
1

WILLIWIN, G.D. (Moskwa)

Functional significance of gastric substitution with a loop of the  
small intestine after its partial or complete resection. Polski  
przegl. chir. 33 no. 7/9:706-713 '61.  
(GASTRECTOMY) (INTESTINE SMALL transpl)

CHATYS-GORSKA, Leokadia; WILIMOWSKA, Maria

A case of pneumo-cardiac form of mucoviscidosis with the tetany syndrome. *Pediat. pol.* 38 no.4:421-428 '63.

1. Z I Kliniki Pediatricznej AM we Wrocławiu Kierownik: prof.  
dr med. H. Hirszfaldowa.  
(PANCREATIC CYSTIC FIBROSIS) (TETANY)

WILIMOWSKI, MARIAN

✓ Synthetic anesthetics. Action of morphine. Marian Wilimowski. *Postępy Hig. i Med. Doświadczalnej* 8, 65-83 (1954).—A review. The anesthetic actions of dolatin (demerol), amidone, cliradone (ketobemidone), dromoran, phenadoxone (heptazol, heptalgin), and morphine are discussed. 184 references. E. Wierblek

WILIMOWSKI, MARIAN

WILIMOWSKI, Marian

Artificial hibernation. Postępy hig.med.dosw. 9 no.3:307-374  
1955.

(HIBERNATION, artificial,  
review)

WILIMOWSKI, M.

COUNTRY : POLAND  
CATEGORY : Pharmacology and Toxicology. Ganglionic Blocking Agents  
ABS. JOUR. : RZhBiol., No. 5 1959, No. 231114  
AUTHOR : Wilimowski, M.; Djaczyszyn, H.  
INST. :  
TITLE : Action of the Derivatives of Pendiomide upon the Nerve Ganglia  
ORIG. PUB. : Arch. Immunol. i terap. doswiadc., 1955, 3, 555-566  
ABSTRACT : In experiments on animals, it was established that the dibromides 3-methyl-N,N,N,N-tetraethyl-3-azopentane\*(I), N,N,N,N-tetraethyl-3-pentamethyl-N,N-dibenzyl-3-azopentane (II) and N,N,N-trimethyl-N,N-dipiperidyl-3-azopentane (III) are more toxic than pendiomide (IV). The least toxic and most potently acting upon nerve ganglia proved to be III (when introduced intravenously, 8 times more potent than IV). The effect of I

\*Thus in Russian abstract

Card:

1/2

COUNTRY : V  
CATEGORY :  
ABS. JOUR. : RZhBiol., No. 5 1959, No. 23114  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : and II is more prolonged than that of IV. In ex-  
cont'd periments with contraction of the third lid in a  
cat, the most potent was III (10 times stronger  
than IV). I, II and III exert more marked hypo-  
tensive action than IV; they do not produce  
tachyphylaxis.-- I. V. Sanotskiy  
  
1. Instytut Immunologii i Terapii Doswiadczałnej PAN we  
Wrocławiu (Dyrektor: prof. dr. S. Słopek) Dział Biochemii  
(Kierownik: doc. dr. W. Manski).  
(AUTONOMIC DRUGS,  
pendionide (seriv., pharmacol. (Pol))

Card:

WILIMOWSKI, Marian; DJACZYSZYN, Henryka; GIELDANOWSKI, J.

Ganglionic action of heterocyclic pendiomide derivatives. Arch. immun. ter. dosw. 4:391-398 1956.

1. Instytut Immunologii i Terapii Doswiadczenj PAN we Wroclawiu  
(Dyrektor: prof. dr. St. Slopek) Pracownia Farmakologiczna (Kierownik:  
prof. dr J. Hano)

(PENDIOMIDE, rel. cpds.

methyl-bis-( $\beta$ -N-ethyl-piperidinium-ethyl) amine, methyl-bis-  
 $\beta$ -N-methyl-morpholinium-ethyl) amine & methyl-bis-( $\beta$ -N-methyl-  
pyrrolidinium-ethyl) amine dibromides, eff. & tox.)

WILIMOWSKI, Marian; DJACZYSYN, Henryka; GIELDANOWSKI, Jerzy

Ganglionic action of xylilen derivatives. Arch. immun. ter. dosw.  
4:407-412 1956.

1. Instytut Immunologii I Terapii Doswiadczałnej PAN we Wrocławiu  
(Dyrektor: prof. dr St. Slopek) Pracownia Farmakologiczna (Kierownik:  
prof. dr J. Hano)

(AUTOMIC DRUGS, eff.

p-bis(N-methylmorpholinium)xylene, p-bis-(N-methylpiperi-  
dinium)xylene & p-bis-(N-methylpyrrolidinium)xylene  
dibromides, eff. on autonomic ganglia)

WILIMOWSKI, Marian; DJACZYSZYN, Henryka

Comparative studies of ganglion blocking drugs. Arch. immun. ter.  
dosw. 4:413-438 1956.

1. Instytut Immunologii i Terapii Doswiadczalnej PAN we Wroclawiu  
(Dyrektor: prof. dr St. Slopek) Pracownia Farmakologiczna (Kierownik:  
prof. dr J. Hano)

(AUTONOMIC DRUGS

ganglion blocking agents, pharmacol. comparison)

WILIMOWSKI, Marian; DJACZYSZYN, Henryka

Studies on the action of analeptics and circulation promoting drugs in hypothermia. Arch. immun. ter. dosw. 4:439-460 1956.

1. Instytut Immunologii i Terapii Doświadczalnej PAN we Wrocławiu (Dyrektor: prof. dr St. Slopek) Pracownia Farmakologiczna (Kierownik: prof. dr J. Hano).

(ANALEPTICS, eff.

on blood pressure in hypothermia)

(HYPOTHERMIA, exper.

eff. of analeptics & various circ. promoting drugs on blood pressure)

(BLOOD PRESSURE, eff. of drugs on

analeptics & various circ. promoting drugs in hypothermia)

HANO, J.; GIELDANOWSKI, J.; WILIMOWSKI, M.

Pharmacodynamic properties of certain antihistaminics. Acta  
physiol. polon. 7 no.1:65-80 1956.

1. Z Zakladu Farmakologii A M we Wroclawiu Kierownik prof. dr.  
J. Hano.

(ANTIHISTAMINICS, effects,  
pharmacodynamics. (Pol))

ARONSKI, Antoni; WILIMOWSKI, Marian; SZYMKIEWICZ, Wanda

Comparison of a domestic ganglion blocking agent with pendionide.  
Polski tygod. lek. 11 no.22:993-994 28 May 56.

1. Z II Klin, Chirurg. Akad. med. we Wroclawiu; kier. prof. dr.  
Wiktor Bross i z Pracowni Farmakologicznej Instytutu Immun. i  
Terapii Doswiadczalnej PAN we Wroclawiu; dyrektor: prof. dr.  
Stefan Slopek. Wroclaw, II Klin. Chirurg.

(AUTONOMIC DRUGS,

pendionide, comparison with other ganglion blocking  
agents (Pol))

WILIMOWSKI, M.

med

Pharmacological properties of new local anesthetic preparations derived from dimethylpiperidine. J. Hano, J. Gieldanowski, and M. Wilimowski. *Acta Polon. Pharm.* 13, 27-34(1956)(English summary).—The activity as a local anesthetic and the general pharmacol. properties of benzoyl-2,6-dimethyl-N-propylpiperidine and benzoyl-2,6-dimethyl-N-ethylpiperidine were investigated and compared with those of benzoyl-2-methyl-N-propylpiperidine (metycaine).  
P. Dreyfuss

3

WU-MOWSKI, M.

✓ On 10/10/78  
citocidas

WILIMOWSKI, M.

GIEDANOWSKI, J.; HANO, J.; WILIMOWSKI, M.

Studies on experimental hemorrhagic shock. II. Effect of simultaneous administration of oxygen and dextran. Acta physiol. polon. 8 no.3:334-335 1957.

1. Z Zakladu Farmakologii A. M. we Wroclawiu Kierownik: prof. dr J. Hano.

- (SHOCK, experimental, hemorrh., eff. of simultaneous oxygen & dextran ther. (Pol))
- (HEMORRHAGE, experimental, eff. of dextran with oxygen in shock (Pol))
- (DEXTRAN, effects, on exper. hemorrh. shock, with oxygen (Pol))
- (OXYGEN, effects, on exper. hemorrh. shock, with dextran (Pol))

WILIMOWSKI, M-

HANO, J.; WILIMOWSKI, M.; GIELDANOWSKI, J.; WOJEWODZKI, W.

Studies on experimental hemorrhagic shock. III. Effect of hypotensive and hypertensive drugs. Acta physiol. polon. 8 no.3:350-351 1957.

1. Z Zakladu Farmakologii A. M. we Wroclawiu Kierownik: prof. dr J. Hano.  
(HEMORRHAGE, experimental,  
eff. of hypertensive & hypotensive drugs on shock (Pol))  
(BLOOD PRESSURE,  
hypertensive & hypotensive drugs, eff. on exper. hemorrh.  
shock (Pol))

MANSKI, Wladyslaw; DJACZYSZYN, Henryka; WILIMOWSKI, Marian

Effect of insulin on glyceimic curve in hypothermia. Med. dosw. mikrob.  
10 no.3:367-376 1958.

1. Z Instytutu Immunologii i Terapii Doswiadczelnej im. Ludwika Hirsz-  
felda.

(HYPOTHERMIA, exper.

eff. of insulin on glyceimic curve in rabbits (Pol))

(BLOOD SUGAR,

in hypothermia, eff. of insulin in rabbits (Pol))

(INSULIN, effects,

on blood sugar in hypothermia in rabbits (Pol))

EXCERPTA MEDICA Sec 2 Vol 12/10 Physiology Oct 59

4872. PHARMACOLOGICAL STUDIES ON NEW SEDATIVES. I. 5-ALLYL-5-(2-HYDROXYPROPYL)BARBITURIC ACID ( $D_2H$ ) - Badania nad nowymi lekami uspokajającymi. I. Własności farmakologiczne kwasu allylo-hydroksypropylo-barbiturowego - Wilimowski M., Orzechowska K. and Kędzierska L. Inst. Immunol. i Terap. Dośw. PAN, Wrocław; Zakł. Farmakol. Akad. Med., Wrocław - ARCH. IMMUNOL. TERAP. DOSW. (Wrocław) 1958, 6/4 (749-759)

The above-named compound (I) has practically no effect in doses up to 0.3 g./kg. Its  $LD_{50}$  i. p. in the mouse is 2.5 g./kg.; its  $LD_{50}$  i. v. in the rabbit is about 1.0 g./kg. At 0.5 g./kg. it causes a marked lowering of blood pressure, lasting 1 hr., and a myocardial depressant effect. This dosage has a weak effect on the CNS; it prolongs anaesthesia induced by amobarbital (80 mg./kg.) or ether and increases the toxic effect of urethan and the convulsive and toxic effects of picrotoxin, but does not affect pentetrazole action. A depressant effect on the respiratory centre appears only when a dosage of 0.7 g./kg. is used. I thus has essentially a weak central depressant action, but also a certain stimulating action. I does not act on autonomic ganglia and has no antiadrenergic or antihistaminic activity. A spasmolytic action on the isolated intestine of rabbit or guinea-pig was observed at a concentration of 1/500, but a stimulating action on both small intestine and bronchi in situ.

EXCERPTA MEDICA Sec 2 Vol 13/5 Physiology May 60

2566. STUDIES ON NEW SEDATIVES. IV. PHARMACOLOGICAL PROPERTIES OF DERIVATIVES OF TETRAHYDROFURANONE - Badania nad nowymi lekami uspokajajacymi. IV. Wlasnosci farmakologiczne pochodnych tetrahydrofuranonu - Willmowski M., Gleidanowski J. and Pelczarska A. Inst. Immunol. i Ter. Dozw. PAN, Zakl. Farmakol., Wroclaw - ARCH. IMMUNOL. TER. DOZW. 1959, 7/2 (211-221) Tables 4

The LD<sub>50</sub> of phenylallylmethyltetrahydrofuranone (I) for mice is 0.984 g/kg. and that of phenyl-(2-hydroxypropyl)methyltetrahydrofuranone (II) is 1.25 g/kg. Both drugs exerted a slight effect on the blood pressure in cats and rabbits and did not affect the respiration of these animals. They were found to have a spasmolytic action on the isolated small intestine and uterus of the rabbit at concentrations of  $1.6 \times 10^{-5}$  to  $6.6 \times 10^{-5}$ . In doses corresponding to 1/10-1/5 of the LD<sub>50</sub> the compounds exerted a tranquillizing effect, a soporific effect appearing after 0.365 g/kg. of I and 1.0 g/kg. of II. Both, particularly I, considerably speeded the onset and prolonged the duration of sleep induced by chloral hydrate, barbital, phenobarbital, hexobarbital, thiopental and ether.

BOBRANSKI, Boguslaw; HANO, Jozef; GIELDANOWSKI, Jerzy; PRELICZ, Danuta;  
PELCZARSKA, Alicja; WILINOWSKI, Marian

On certain spiro-pyrano-barbiturate compounds. Arch.immun.ter.  
dosw. 8 no.2:355-359 '60.

1. Zaklad Syntezy Srodkow Leczniczych i Zaklad Farmakologii  
Instytutu Immunologii i Terapii Doswiadczalnej PAN we Wroclawiu  
Zaklad Chemii Farmaceutycznej Akademii Medycznej we Wroclawiu.  
(BARBITURATES pharmacol)

GIELDANOWSKI, Jerzy; WILIMOWSKI, Marian

Studies on new hypnotic drugs. Communication 6. Pharmacological properties of new methylallyltetrahydrofuranone derivatives. Arch.immun.ter.dosw. 8 no.2:361-369 '60.

1. Zakład Farmakologii Instytutu Immunologii i Terapii Doświadczalnej PAN we Wrocławiu. Zakład Farmakologii Akademii Medycznej we Wrocławiu.  
(FURANS pharmacol)  
(HYPNOTICS AND SEDATIVES pharmacol)

WILIMOWSKI, Marian; GIELDANOWSKI, Jerzy; KEDZIERSKA, Lidia

Studies on new hypnotic drugs. Communication 7. Pharmacological properties of new derivatives of barbituric acid and hydantoin. Arch.immun.ter.dosw. 8 no.2:371-375 '60.

1. Zaklad Farmakologii Instytutu Immunologii i Terapii Doświadczalnej PAN we Wrocławiu. Zaklad Farmakologii Akademii Medycznej we Wrocławiu.

(BARBITURATES pharmacol)

(HYDANTOINS pharmacol)

(HYPNOTICS AND SEDATIVES pharmacol)

WILIMOWSKI, Marian; GIELDANOWSKI, Jerzy; PELCZARSKA, Alicja

Studies on new hypnotic drugs. Communication 8. Central activity  
of new derivatives of barbituric acid. Arch.immun. ter. dosw.  
8 no.2:377-387 '60.

1. Zaklad Farmakologii Instytutu Immunologii i Terapii Doswiadczalnej  
PAN we Wroclawiu. Zaklad Farmakologii Akademii Medycznej we  
Wroclawiu.

(BARBITURATES pharmacol)

WILIMOWSKI, Marian; BARAN, Lech

Tachyphylaxis in the analgesic activity of ganglionplegic drugs.  
Arch.immun.ter.dosw. 8 no.3:481-486 '60.

1. Pharmakologische Abteilung, Institut für Immunologie und  
Experimentelle Therapie der Polnischen Akademie der Wissenschaften  
in Wrocław, Pharmakologisches Institut der Medizinischen Akademie  
in Wrocław

(AUTONOMIC DRUGS pharmacol)  
(ANALGESICS pharmacol)

WILIMOWSKI, Maian; BARAN, Lech

Effect of hypertensive drugs on analgesia. Arch.immun.ter.dosw.  
8 no.3:487-496 '60.

1. Pharmakologische Abteilung, Institut für Immunologie und  
Experimentelle Therapie der Polnischen Akademie der Wissenschaften in  
Wroclaw, Pharmakologisches Institut der Medizinischen Akademie  
in Wroclaw.

(VASOPRESSIN pharmacol)  
(SYMPATHOMIMETICS pharmacol)  
(ANALGESICS pharmacol)

WILIMOWSKI, M.

SURNAME, Given Names

Country: Poland

Academic Degrees: not given

Affiliation: Presumed Ludwik Hirszfeld Institute of Immunology and Experimental Therapy (Instytut Immunologii i Terapii Doswiadczalnej im. Ludwika Hirszfelda), Polish Academy of Sciences (PAN--Polska Akademia Nauk), Wroclaw; Director: Prof. Stefan SLOPEK, Dr.

~~Data~~  
Source: Warsaw, Postepy Higieny i Medycyny Doswiadczalnej, Vol XV, No 4, 1961, pp 396-397.

Data: "Concerning Certain Spiro-Pyran-Barbituric Compounds."

English abstract of article, originally published in Arch. Immunol i Terapii Dosw., 1960, 8, 355.

Authors:

BOBRANSKI, B.

HANO, J.

GIEDANOWSKI, J.

PRELICZ, D.

PELCZARSKA, A.

WILIMOWSKI, M.

SURNAME, Given Names

Country: Poland

Academic Degrees: not given

Affiliation: Presumed Ludwik Hirszfeld Institute of Immunology and Experimental Therapy (Instytut Immunologii i Terapii Doswiadczałnej im. Ludwika Hirszfelda), Polish Academy of Sciences (PAN-Polska Akademia Nauk), Wrocław; Director: Prof. Stefan SLOPEK, Dr.

-Source: Warsaw, Postępy Higieny i Medycyny Doswiadczałnej, Vol XV, No 4, 1961, pp 408-410.

Data: "Investigations of New Sedative Drugs: VI. Pharmacologic Properties of New Derivatives of Methyl-Allyl-Tetra-Hydrofuranon."

English abstract of article, originally appearing in Arch Immunol i Terapii Dosw., 1960, 8, 361.

Authors:

GIEEDANOWSKI, J.

WILIMOWSKI, M.

8  
GPO 982643

WILIMOWSKI, M.  
SURNAME, Given Names

Country: Poland

Academic Degrees: [not given]  
[Presumed]

Affiliation: Ludwik Hirszfeld Institute of Immunology and Experimental Therapy (Instytut Immunologii i Terapii Doswiadczałnej im. Ludwika Hirszfelda), Polish Academy of Sciences (PAN-Polska Akademia Nauk), Wrocław; Director: Prof. Stefan SLOPEK, Dr.

Source: Warsaw, Postępy Higieny i Medycyny Doswiadczałnej, Vol XV, No 4, 1961, pp 410-411.

Data: "Tachyphylaxis if the Analgetic Action of Ganglioplegic Drugs."  
English abstract of [German] article; originally published in Arch. Immunol. i Terapii Dosw., 1960, 8, 481.

Authors:  
WILIMOWSKI, M.  
BARAN, L.

670 981643

WILIMOWSKI, M.  
SURNAME, Given Names

Country: Poland

Academic Degrees: [not given]

[Presumed] Ludwik Hirsztfeld Institute of Immunology and Experimental Therapy (Instytut Immunologii i Terapii Doswiadczalnej im. Ludwika Hirsztfelda), Polish Academy of Sciences (PAN-Polska Akademia Nauk), Wroclaw; Director: Prof. Stefan SLOPEK, Dr.

Source: Warsaw, Postępy Higieny i Medycyny Doswiadczalnej, Vol XV, No 4, 1961, pp 411-413.

Data: "The Effect of Hypertensive Drugs on Analgesia."

English abstract of [German] article; originally published in Arch. Immunol. i Terapii Dosw., 1960, 8, 487.

Authors:

WILIMOWSKI, M.

BARAN, L.

GPO 981643

SURNAME, Given Names

*WILIMOWSKI, M.*  
Country: Poland

Academic Degrees: [not given]

Affiliation: [Presumed] Ludwik Hirszfild Institute of Immunology and Experimental Therapy (Instytut Immunologii i Terapii Doswiadczalnej im. Ludwika Hirszfilda), Polish Academy of Sciences (PAN--P

Source: Akademia Nauk), Wroclaw; Director: Prof. Stefan SLOPEK, Dr

Source: Warsaw, Postepy Higieny i Medycyny Doswiadczalnej, Vol XV, No  
Data: 1961, pp 413-414.

Data: "Studies of New Sedative Drugs: VII. The Pharmacologic Properties of New Derivatives of Barbituric Acid and Hydantoin."

English abstract of article, originally published in Arch. Immunol. i Terapii Dosw., 1960, 8. 371.

Authors:

WILIMOWSKI, M.

GIEDANOWSKI, J.

KEDZIERSKA, L.

670 9816

SURNAME, Given Names

*Wilkowski, M.*

Country: Poland

Academic Degrees: [not given]

[Presumed] Ludwik Hirszfeld Institute of Immunology and Experimental Therapy (Instytut Immunologii i Terapii Doswiadczalnej im. Ludwika Hirszfelda), Polish Academy of Sciences (PAN\*-Polska Akademia Nauk), Wroclaw; Director: Prof. Stefan SLOPEK, Dr.

Source:

Warsaw, Postepy Higieny i Medycyny Doswiadczalnej, Vol XV, No 4, 1961, pp 414-416.

Data:

"Studies of New Sedative Drugs: VIII. The Central Action of New Derivatives of Barbituric Acid." English abstract of article, originally published in Arch. Immunol. i Terapii Dosw., 1960, 8, 377.

Authors:

WILIMOWSKI, M.

GIEDANOWSKI, J.

PELCZARSKA, A.

6PO 981643

BOBRANSKI, Boguslaw; GIELDANOWSKI, Jerzy; PELCZARSKA, Alicja;  
SEDZIMIRSKA, Bozena; SOBCZYK, Anna; WILLIMOWSKI, Marian

On some aliphatic and alicyclic amines with hypotensive activity .  
Arch. immun. ther. exp. 10 no.4:818-833 '62.

1. Department of Pharmaceutical Chemistry, School of Medicine,  
Wroclaw; Department of Pharmacology, Institute of Immunology  
and Experimental Therapy, Polish Academy of Sciences, Wroclaw.  
(AMINES) (ANTIHYPERTENSIVE AGENTS)  
(PHARMACOLOGY)

WILINSKA, J.

Wilinska, J. Polanowski, T.  
"A City Reporter in a Village." Tr. from the Polish." p. 14.  
(Magyar Radio. Vol. 9, no. 22, June 1953, Budapest.)

SO: Monthly List of East European Accessions, Vol. 2, No. 9, Library of Congress, September 1953, Uncl.

WILINSKI, Jerzy

Work plan of the State Geological Survey for 1965. Przegl geol  
13 no.2:49-52 F '65.

1. Central Agency for Geology, Warsaw.

WILINSKI, Jerzy

Plan of geological works for 1963. Przegl geol 11 no.1:1-4  
Ja '63.

1. Centralny Urząd Geologii, Warszawa.

~~WILK, Andrzej, mgr inz.~~; WIRBILIS, Stanislaw, mgr inz.;  
KOWALSKI, Wieslaw, mgr inz.

Technological press review. Przegl mech 23 no. 2: 56-60  
Ja '64.

WIRBILIS, Stanislaw, mgr inz.; KOWALSKI, Wieslaw, mgr inz.; WILK,  
Andrzej, mgr inz.

Review of technological periodicals. Przegl mech 23 no. 3:  
88-92 10 F '64.

WILK, Andrzej, mgr inż.

Critical way analysis. Przegl mech 23 no. 4:118-119 25 F '64.

WILK, Andrzej, mgr inż.

Personality of an engineer specialized in production organization. Przegl techn 85 no.45: 6 8 N°64

WILK, Andrzej, mgr inż.

Education of young scientists as a source and consequence of  
technological progress. Przegl techn 85 no.52:1, 3 27 5 '64.

WILK, Antoni, inz.

Scientific and technical activities of the Scientific-  
Technical Associations of the Gdansk Voivodeship.  
Przeł techn 85 no. 25: 3 21 Je '64.

1. Deputy Chairman of the Voivodeship Contact Committee  
of the Central Technical Organization, Gdansk.

F-1

POLAND / Microbiology. General Microbiology.

Abs Jour : Ref Zhur - Biol., No 20, 1958, No. 90753

Author : Wilk, Edyta

Inst : Not given

Title : Preliminary Studies on Bacitracin

Orig Pub : Med. dos-wiad. i mikrobiol., 1957, 9, No 1, 63-68  
(Polish; rus. Russ., Eng.)

Abstract : The optimal nutrient medium for the formation of bacitracin (I) by the culture *Bacillus subtilus* 10716 proved to be medium A with soybean meal, on which at the end of 56 hours of cultivation the activity consisted of 39.6 units per 1 ml at a pH of 8.2. The results were not as good in a synthetic medium with l-glutamic and citric acids (medium B) and in a medium with peanuts (medium C) (19.8 units per ml up to 96 hours of fermentation and 10 units per ml up to 72 hours respectively). The pH of the medium was of

Card 1/2

WILK, Edyta  
WOZNICKZ, Wanda; KOWSZYK, Zuzanna; MAKAROWSKA, Zofia; NIEMCZYK, Hanna;  
BOROWIECKA, Barbara; SZCZESNIAK, Tadeusz; TERLECKA, Janina; WILK, Edyta

Studies on antimycotic antibiotics. II. a new antibiotic. Med. dosw.  
mikrob. 9 no.3:293-308 1957.

1. Z Zakladu Antybiotykow PZH w Warszawie.

(ANTIBIOTICS,

allomycin, antifungal properties (Pol))

WOZNICKA, Wanda; KOWSIK, Zuzanna; BOROWIECKA, Barbara; CHOJNOWSKI, Wawrzyniec;  
DOBRZANSKA, Roza; LUBINSKI, Olgierd; MAKAROWSKA, Zofia; NIEMCZYK, Hanna;  
PASZKIEWICZ, Alina; RUCZAJ, Zbigniew; SOBICZEWSKI, Wojciech; SZCZESNIAK,  
Tadeusz; SZENIAWSKI, Piotr; TERLECKA, Janina; WILK, Edyta; WITUCH, Krystyna

Alomycin; a new antifungal antibiotic. Med. dosw. mikrob. 9 no.4:441-450  
1957.

1. Z Zakladu Antybiotykow Panstwowego Zakladu Higieny w Warszawie.  
(ANTIBIOTICS, preparation of  
alomycin, fungicidal properties (Pol))

TYC, Marian; TERLECKA, Janina; WILK, Edyta

Essay with the production of oleandomycin. Med. dosw. mikrob, 11  
no.2:179-190 1959.

1. Z Zakladu Mikrobiologii Instytutu Antybiotyków.  
(OLEANDOMYCIN, chem.)

POLAND

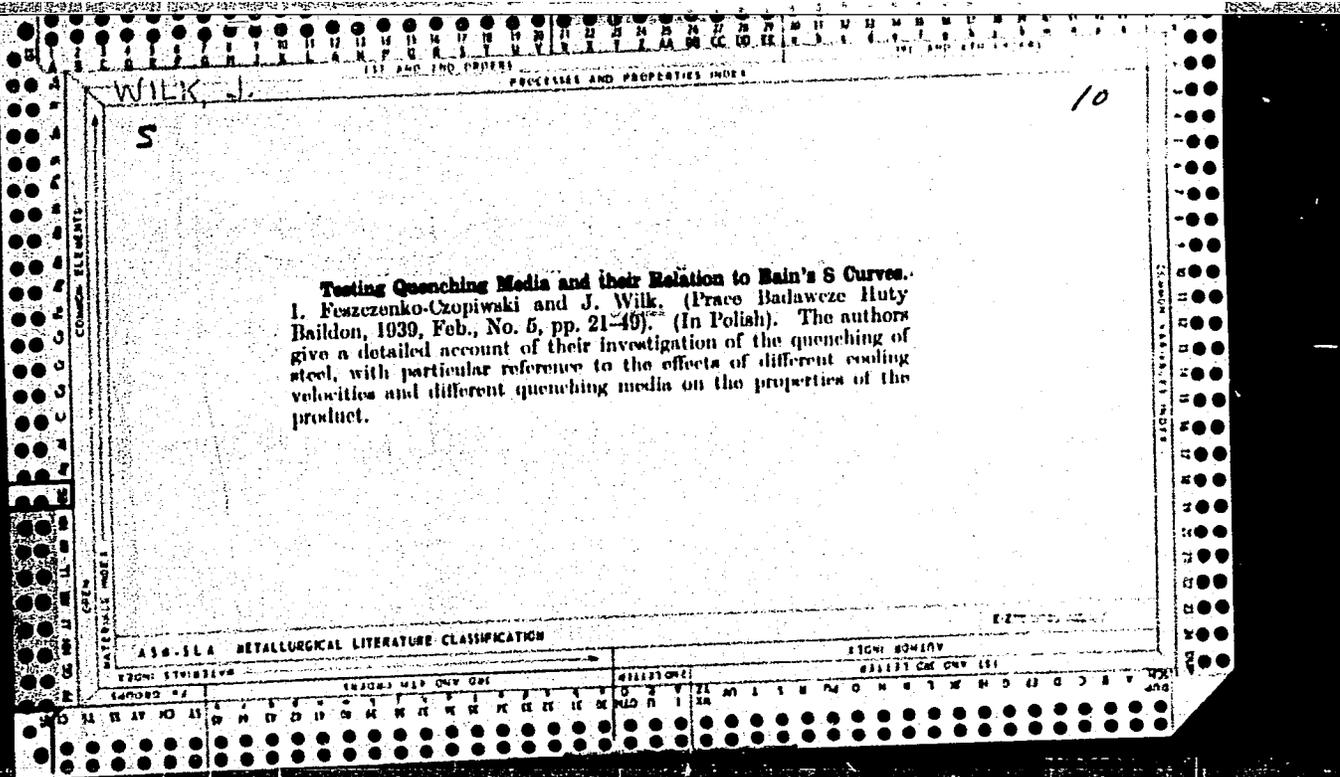
WILK, Grazyna, lek wet., WZHW [Wojewodzki Zaklad Higieny Weterynaryjnej, Wojewodstwo Office of Veterinary Hygiene] in Szczecin. (Director: lek. wet. Boleslaw UZIEBLO).

"Ezootic Myxomatosis of Rabbits in the Szczecin Area."

Warsaw-Lublin, Medycyna Weterynaryjna, Vol 19, No 2, Feb 63, p 77.

Abstract: Author notes briefly the history of this disease not noted in Europe until 1952 and in Poland until 1955. and reports on several cases which occurred in the Szczecin area in 1961. In addition to adding the determined pulmonary hemorrhage, not previously reported in the literature, the author notes the absence of this disease in other areas of the wojewodztwo and ascribes it to the low elevation and abundance of waterways in Szczecin. Of the six (6) references, one (1) is French, two (2) are Russian, and three (3) are Polish.

1/1



WILK, J.

2695

729.1.013:891.8

✓ Wilk J. The Architecture of Precast Sets.

„Architektura zespołów prefabrykowanych” Inżynieria i Budownictwo. No. 1. 1953. pp. 2—8. 27 figs.

Polish Technical Abst.  
No. 1 1954  
Building Industry and  
Architecture

In precasting, which represents a technical progress in the building industry, architectural problems must be posed in a decisive form. The participation of an architect is essential in working out precast sets for industrial building.

BARANOWSKI, T.; WILK, J.; SIEMION, I.Z.

Inactivation of bradykinin in urea solutions. Bull. acad. Pol.  
sci. [Biol.] 13 no.4:287-289 '65.

1. Submitted March 18, 1965.

WILK, P.

"Method of Determining Magnesium Oxide Content in Blast Furnace Slag," Hutnik,  
Stalinograd, Jul/Aug 56. Published from the Institute of Metallurgy.

WILK, P.

Poland/Analytical Chemistry - Analysis of Inorganic Substances, G-2

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61872

Author: Wilk, P.

Institution: None

Title: Rapid Methods for Determining  $\text{SiO}_2$ ,  $\text{CaO}$ ,  $\text{MnO}$  and Total Fe in Open-Hearth Slag

Original  
Periodical: Szybkie metody oznaczania  $\text{SiO}_2$ ,  $\text{CaO}$ ,  $\text{MnO}$  i Fe całkowitego w zuziu martenowskim, Hutnik (Polska), 1956, 23, No 1, Biul. Inform. IMH, 1-2; Polish

Abstract: To determine  $\text{SiO}_2$  0.25 g comminuted slag dissolved in 30 ml hot mixture (1:1) of dilute  $\text{HCl}$  (1:1) and  $\text{HNO}_3$  (1:1), saturate with  $\text{KCl}$ , at  $18-20^\circ$  added 20 ml saturated solution  $\text{Na}_2\text{F}_2$ , stirred 1-2 minutes, filtered, precipitate washed 10 times with saturated solution  $\text{KCl}$ , boiled with 100 ml water, titrated to phenolphthalein with  $\text{NaOH}$  solution; duration of determination 15 minutes, error 0.2%. To determine  $\text{CaO}$  slurry of 0.2 g slag in small amount of water heated

Card 1/2

Poland/Analytical Chemistry - Analysis of Inorganic Substances, G-2

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61872

Abstract: with 30 ml HCl (1:1), added 30 ml boiling saturated solution of  $(\text{COONH}_4)_2$ , neutralized with solution of  $\text{NH}_4\text{OH}$  (1:1) to methyl orange, boiled 1-2 minutes, precipitate filtered off, transferred into hot mixture of 100 ml water and 40 ml  $\text{H}_2\text{SO}_4$  (1:5), titrated with 0.1 N  $\text{KMnO}_4$ ; duration of determination 20 minutes, error 0.5%. To determine MnO slurry of 0.25 g sample in 2-3 drops of water dissolved with heating in mixture of 20 ml HCl (1:1) and 8-10 drops  $\text{HNO}_3$  (Sp. Gr. 1.4) poured into 400 ml hot water added slurry of ZnO (50 g ZnO in 500 ml water) until a precipitate is formed, boiled, and titrated with 0.1 N solution  $\text{KMnO}_4$ ; duration of analysis 15-20 minutes, error 0.3%. To determine total Fe slurry of 0.25 g sample in 1 ml water heated 1-2 minutes with 20 ml HCl (Sp. Gr. 1.19) and 2-3 drops  $\text{H}_2\text{F}_2$  (or 0.25 g  $\text{Na}_2\text{F}_2$ ), added 0.15 g  $\text{KClO}_3$ , boiled 4-5 minutes, reduce  $\text{Fe}^{3+}$  with  $\text{SnCl}_2$  solution (50 g  $\text{SnCl}_2 \cdot 2\text{H}_2\text{O}$  in 100 ml HCl (Sp. Gr. 1.19) diluted to one l), cooled rapidly, added 20 ml 5% solution  $\text{HgCl}_2$ , poured into mixture of 400 ml water and 25 ml Reinhardt solution containing several drops of  $\text{KMnO}_4$  solution, titrated with 0.1 N solution  $\text{KMnO}_4$ ; duration of determination 20 minutes, error 0.3%.

Card 2/2

I 45369-66 EWT(1)/T IJP(c) AI  
ACC NR: AP6026994 (N) SOURCE CODE: PO/0045/66/029/005/0623/0630

30  
28  
B

AUTHOR: Handerek, J.; Wilk, R.

ORG: Departments of Experimental Physics, Higher School of Pedagogy,  
Katowice (Katedra Fizyki Doswiadczalnej Wyzszej Szkoły Pedagogicznej)

TITLE: The influence of storage temperature on the change of polarity of electrets

SOURCE: Acta physica polonica, v. 29, no. 5, 1966, 623-630

TOPIC TAGS: storage temperature, polarity change, electret

ABSTRACT: The influence of the temperature at which electrets of beeswax were stored on the time of transition of a heterocharge into a homocharge has been studied. Increasing the temperature of the electrets before removal of the polarizing electrodes caused an increase in the time after which polarity reversal occurred; a decrease in storage temperature shortened this time. Variations of the storage temperature of electrets after the electrodes had been removed caused the opposite effects of those mentioned above. The results obtained speak against

Card 1/2

L 4536-006  
ACC NR: AP6026994

2

the hitherto accepted hypothesis of simultaneous creation of true heterocharges and homocharges during the polarization process. The authors are greatly indebted to Professor Stanislaw Glucksman and Professor Tadeusz Piech for their interest in the work and for a number of valuable discussions during its performance. Orig. art. has: 6 figures. [Authors' abstract] [KS]

SUB CODE: 20/ SUBM DATE: 21Jun65/ ORIG REF: 001/ SOV REF: 002/  
OTH REF: 004/

Card 2/2 *summ*

Wilk, S.

3025

650.54 : 622.233 : 622.01 '67

Wilk, S. Synchronization of Main Mining Operations.

"Synchronizacja głównych czynności wydobywania". *Górnictwo*, No. 2, GP  
Kraków, 1954, PWN, pp. 133-160, 16 figs.

The paper characterizes the main mining operations when the objective is the full exploitation of the productive potential of a whole mining complex. Equations and graphs are given quantitatively representing variations occurring in the main output operations in the time function, as well as graphs representing the work of a shaft, of loading, and of underground haulage. Other problems dealt with are: the time occupied by haulage, and its influence on hoisting in the shaft as well as on the work and loading at the face; the synchronization of the work of the shaft with other operations and with underground haulage; the number of loaded and empty mine cars to be in reserve when the faces are worked by two and three shifts; calculating the minimum car stock; the circulation system of cars; and the correct distribution of empty mine cars. Finally, it is stated that the magnitude of the differences which may arise between the results actually obtained and those obtained from the coordination method, reflects the organizational deficiencies in a mine. An example of synchronization of mining operations is given.

WILK, S.

Synchronizing main mining operations. p. 179, Vol. 11, no. 5, May 1955,  
PRZEGLAD GORNICZY  
SO:MONTHLY LIST OF EAST EUROPEAN ACCESSIONS, (EEAL), LC, Vol. 4, No. 9,  
Sept. 1955, Uncl.

Wilk, Slawomir, mgr., inz.

Measurements of the dynamic enthalpy of low-pressure wet steam. Ciępl  
masz przepływ nr. 39/40:55-60. '62

1. Politechnika Śląska, Gliwice.

WILK, Sławomir

Stagnation enthalpy measurements of wet low-pressure steam.  
Archiw bud masz 10 no. 4: 323-332 '63.

1. Politechnika, Gliwice.

OCHEDUSZKO, Stanislaw, prof. dr. inz.; WILK, Slawomir, dr inz.

Theoretical basis of head management in industry. Pt.2.  
Gosp paliw 12 no.8/9:286-291 Ag-S '64.

OCHEBUSZKO, Stanislaw, prof. dr inz.; WILK, Slawomir, dr inz.

Theoretical principles of heat management in industry. Pt. 3.  
Gosp paliw 12 no.12:413-417 D '64.

OCHEDUSZKO, Stanislaw, prof. dr inz.; WILK, Slawomir, dr inz.

Theoretical principles of heat management in industry.  
Pt.4. Gosp paliw 13 no.1:17-22 Ja '65.

OCHEDUSZKO, Stanislaw, prof. dr inz.; WILK, Slawomir, dr inz.

Theoretical foundations of heat management in industry. Pt. 6.  
Gosp paliw 13 no.2:54-59 F '65.

ADAMSKI, Stanislaw; SLIWINSKI, Marian; WILK, Tadeusz

Cancer of the cardia. Polski przegl. chir. 33 no.7/3:738-740 '61.

1. Z II Kliniki Chirurgicznej AM w Lodzi Kierownik: doc. dr J.Moll.  
(STOMACH NEOPLASMS)

WILK, Wladyslaw, (Krakow)

Problem of improving the organization and functioning of elements participating in the realization of capital investments in the construction industry. Przegl budowl i bud mieszk 35 no. 6: 241-244 Je '63.

OCHEDUSZKO, Stanislaw, prof. dr inz.; WILK. Slawomir, dr inz.

Theoretical principles of heat management in industry. Gosp paliw  
12 no.7:237-240 J1 '64.

OCHEBUSZKO, Stanislaw, prof. dr inz.; WILK, Slawomir, dr inz.

Theoretical fundamentals of heat management in industry. Pt.7.  
Gosp paliw 13 no.3:87-92 Mr '65.

OCHEBUSZKO, Stanislaw, prof, dr inz.; WILK, Slawomir, dr inz.

Theoretical foundations of heat management in industry. Pt.9.  
Gosp paliw 13 no.4:121-124 Ap '65.

BC

PROCESSES AND PROPERTIES INDEX

B-I-2

Nitrogen in natural gas and the evaluation of  
gas. Z. WILK (Przemysl Naft., 1933, 8, 343-348).—  
The calorific val. of Polish natural gas varies from 3000  
to 20,000 g.-cal. per cu. m. Cr. Abs.

ASM-31A METALLURGICAL LITERATURE CLASSIFICATION

COMMON ELEMENTS

COMMON VARIABLES INDEX

GROUPS

ALPHABETIC INDEX

NUMERICAL INDEX

ALPHABETIC INDEX

NUMERICAL INDEX

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES

71

CA

**Scarcity of fuels.** *Zdzislaw Wilk*, *Kapalnichestwo*  
*Naflowo w Polsce 3, 301-3 (1938).* The utility of the  
various substances used as components in aviation fuels  
depends not only on their value as such, but also on their  
effect on the mixt. obtained. A table shows the no. of  
points for each of the desirable properties and the total  
points awarded to 8 aviation-fuel components in an at-  
tempt to evaluate their overall usefulness. The max.  
rating for each property is 100 points multiplied by a factor  
designating its relative importance, e. g., 1.0 for octane  
no., 0.1 for source of origin, 0.2 vapor pressure, 0.7 anti-  
knock value in the engine, 0.6 lead sus. capability, etc.  
On this basis, isooctane occupies the first place, followed  
by ketones, gasoline, premium aviation gasoline, iso-  
propyl ether, etc., the aromatic compds. being last with  
350 points. The manuf. of isooctane from natural gas  
and of isopropyl ether from potatoes is urged.  
Bruno C. Metzner

COMMON ELEMENTS

MATERIALS INDEX

ASB-55A METALLURGICAL LITERATURE CLASSIFICATION

TECHN. NOMENCL.

1ST AND 2ND ORDERS

1ST AND 2ND ORDERS

1ST AND 2ND SERIES      PROCESSES AND PROPERTIES INDEX      3RD AND 4TH SERIES

J

1728. PETROLEUM (IN POLAND) IN 1947. Wilk, Z. (Nafta, Jan. 1948, vol. 4, 1-6). Describes changes in organization of the Polish Petroleum Industry from November 1945 to December 1947, and mentions achievements made, and plans for 1948. Previously relying on help from U.N.R.R.A. and U.S.S.R., the industry has been developed along scientific lines. Objectives were achieved in all the various branches due to the separation of the Synthetic Works from Central Office for Liquid Fuel Industry- now the Petroleum Industry. This enabled the administrative staff to do its duty which previously fell on the shoulders of the technical man. Careful planning brought good results; equipment and transportation bottlenecks were cleared. The aim was set on more production and less drilling, and 7.5 tons per drilled metre was reached. Daily production reached 380 tons of crude per day. Maximum drilling speed of 65 m. per day was reached; many new minerals were located. A total of 174,866.4 tons was refined in 1947. A laboratory

SB-514 METALLURGICAL LITERATURE CLASSIFICATION      1ST AND 2ND SERIES

1ST AND 2ND SERIES      3RD AND 4TH SERIES

was established and it produced a popular burner, a concussion coring bit, and other improvements. Technical education was widely supported and Central Petroleum Workshops were established. A Special exploration company carries on search for oil. The industry is now a profit-making one and supplies 30% of the country's requirements. Plans include a solvent-refining plant, natural gas supply to Warsaw, and general development in all directions.

I.P.

-WILK, Z.

*Fuel ②*

Journal of Inst. of Petroleum.  
 V. 38 No. 339  
 Mar. 1962  
 Transport and Storage

678. Storage and transport of natural gas. Z. Wilk. Proc. of Main Petroleum Institute (Polish) Ministry of Mining, Cracow, 1960, No. 2, pp. 12.—The consumers of national gas are industry and householders. Their needs vary seasonally and from hour to hour. Steady production will cope with such demands only if gas-holders are used. If gas is to be conducted over large distances compressors are necessary and loss of pressure is calculated and plotted. A formula giving the most economical pipe-line dia is given. Other problems resulting from deviation from ideal gas laws, seasonal fluctuation of consumption, liquefaction, and mixing with town gas are all dealt with.

*M. B. 5-27-62*

F

G

5033. OHM'S LAW FOR GAS FLOW IN PIPE LINES. WILK, Z. (Harta, July 1950, vol. 6, 197, 198). Gas in long pipe lines must be considered as a compressible fluid. The resistance of a long pipe line can be obtained using Jacob's formula of 1922 or others such as Heymouth's. All include  $\lambda = a$  coefficient of flow. Recent work shows the similarity between fall of pressure:  $\Delta P = P_1^2 - P_2^2 = (c_1 v^2)(c_2 L^{-3})$  and Ohm's law ( $V = i^2 R$ ,  $L = \pi r^2$ ,  $d = \pi r$ ).  $(c_1 v^2)$  is equivalent to the current intensity, and  $(c_2 L^{-3})$  contains the resistive property of the pipe line. Other relations for series and parallel connections follow. I.P.

PTA

1336  
WIK 7. Displacement Pumps for Crude Oil Exploitation  
"Pompy wyporowe z eksploatacji rezy naftey". Nafta, No. 11,  
1951, pp. 306-308

The difficult tasks of crude oil exploitation from oil wells are carried out, particularly in the case of major depths, with the aid of ordinary piston pumps which frequently fail and require constant inspection — a matter of gross inconvenience; frequent defects in the pumps cause, moreover, delays in the exploitation of oil wells. The article deals with the possibilities of replacing, in certain instances, piston pumps by displacement pumps, simpler in operation and design, and moreover functioning much longer without having to be brought to the surface than piston or centrifugal pumps. The author describes, in both their technical and economic aspects, the design and operation of displacement pumps, with special reference to the practicability of gradually adopting them for the exploitation of oil wells.

Wit. Zdzisław [illegible] [illegible]

WILK, Z.

"Principles of Modern Exploitation of Crude Oil and Microhydraulics." (To be contd.)  
p. 66 (NAFTA, Vol. 9, No. 3, Mar. 1953) Warszawa

SO: Monthly List of East European Accessions, Library of Congress, Vol. 2, No. 10,  
October 1953. Unclassified.

WILK, Z.

"Principles of Modern Exploitation of Crude Oil Microhydraulics." p. 88 (NAFTA, Vol. 9, No. 4, Apr. 1953) Warszawa

SO: Monthly List of East European Accessions, Library of Congress, Vol. 2, No. 10, October 1953. Unclassified.

WILK, Z.

POL.

621.319.1  
 1506. Typical 110 kV electric power lines. J.  
 CIUWALIBO, W. DEMEL, Z. WILK AND Z. ZAGLIZINSKI.  
 Przegląd elektrotech., 30, No. 9, 381-6 (1954) in Polish.  
 Aluminum cables steel-reinforced have been  
 chosen for transmission of 30-40 MW over approx.  
 50 km. Two overhead ground wires are multi-  
 grounded on steel tower lines. Wood-pole lines have  
 only 2 km of overhead ground wire on approaches to  
 substations. Tensions in ACSR at 15°C limited to  
 20% of ultimate strength, in steel wire to 15%. Steel  
 towers are designed for spans of 300 m, wood struc-  
 tures for 200 m spans. Six insulators of two types  
 were used for suspension and dead-end strings. Steel  
 towers, lattice, multiple-braced, are factory-welded  
 in sections for bolting on site. Semi-dead-end towers  
 were designed for one broken conductor. Only  
 6 types of towers were designed, heights being suitably  
 increased by standard footing extensions. The type  
 of prefabricated foundation to be used depends on  
 soil classification. Wooden structures use only  
 gusset plates with U-bolts, no through bolts, a single  
 pole diagonal brace; the welded crossarm will be  
 superseded by timber. Adequate foundations and  
 structure height are obtained by use of prefabricated  
 reinforced concrete stubs with horizontal cross-pieces.  
 J. LUKASZEWICZ

WILK, Z.

Relation between porosity and depth of sandstone of the  
Laziska and Libdaz beds (Upper Carboniferous), Upper Silesian  
Coal Basin. Bul geolog PAN 11 no.2:113-118 '64.

1. Department of Mining Geology of the School of Mining  
and Metallurgy, Krakow. Presented by W. Goetel.

WILK, Z.

WILK, Z. Preparations for the injection of water into petroleum deposits. p.53

Vol. 10, no.3, Mar. 1954

NAFTA

TECHNOLOGY

Krakow, Poland

So: East European Accession, Vol. 5, no. 5, May 1956

WILK, Z.; WALIDUDA, A.; CZASTKA, J.

"Training of Petroleum Personnel in the Years 1945-1954", p. 167, (NAFTA, Vol. 10, No. 7, July 1954, Krakow, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 5, May 1955, Uncl.

Wilk, Z.

~~REF~~ . . . POL . . .

809. Preparations prior to water injection into oil-bearing formation. Z. Wilk. *Nafta (Krakow)*, 1954, 10, 53-6.— Unless water injection is based on most accurate knowledge of the formation and its history a considerable quantity of crude may be permanently lost in it through such process. A 3-dimensional detailed map must be produced giving the location of all boreholes, properties of all rocks, and all operations carried out in the past. Polish oil-bearing formations appear to be exhausted, but they are fairly shallow. If there is more oil below these century-old fields this will have to be obtained according to scientific principles, so the subject is always going to be topical. A graph showing "water (in)-crude (out)" relationship in one field over 1943-51 in litres/10<sup>4</sup> sq. metres shows that at the beginning and end of that period oil produced was less than 10 litres/10<sup>4</sup> sq. metres, but water injection, which stood at ca 800 litres/10<sup>4</sup> sq. metres in 1943, and was stopped in 1948, caused a 30-fold rise in production during these years. The success was due to a thorough knowledge of the formation.

The choice of place for injection and source of the water are important. M. S.

*Handwritten signature*

WILK, Z. (Ing.)

Poland

Gaz aiemy--PWT 1952

SO: Oil Wells, by Z. Onlyszkiewicz, PWSZ, Warsaw, 1955, Unclassified.

WIŁK, Z. (Ing.)

Poland

Pompy wyporowe w eksploatacji ropy naftowej--Nafta 81/1951.

SO: Oil Wells, by Z. Onyszkiewicz, PWSZ, Warsaw, 1955, Unclassified.

WILK, Z. (Ing.)

Poland

Dowiercanie ropy i gazu--Nafta VI/1951.

SO: Oil Wells, by Z. Onyszkiewicz, PWSZ, Warsaw, 1955, Unclassified.

MILK, Z.

Allowed gas extraction from gas deposits; criteria and means of determination of extraction. p. 140.

GAZ, WODA I TECHNIKA SANITARNA, Warszawa, Vol. 29, no. 5, May 1955.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, no. 10, Oct. 1955, Uncl.

WI1K, Z.

Storing gas in porous rock deposits.

p. 401.

No. 9, Sept. 1955

PRZEGLAD GEOLOGICZNY  
Warszawa

SOURCE: East European Accessions List (EEAL), LC. Vol. 5, no. 2, Feb. 1956

WILK, Z.

Rational management of the surplus gas production. p. 13  
(GORNICTWO No. 3, 1956 Krakow, Poland)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 9, Sept. 1957, Uncl.

QMB  
11

148 On the geological reconstructions, appraisal, needs,  
and utilization of petroleum industry in first post-war years.

WILK, Z.

"A survey of the tectonics of the Libiaz hills." p.47

GEOLOGIA.

(Akademia Gorniczo-Hutnicza w Krakowie) Krakow, Poland. No. 2, 1958

WILK, Z.

TECHNOLOGY

PERIODICAL: NAFTA, Vol. 11, no. 11, Nov. 1958.

WILK, Z. A contribution to the problem of microhydraulics. p. 297.

Monthly List of East European Accessions (EEAI) IC Vol. 8, no. 4  
April 1959, Unclass.

WLIK, Z.

Modern methods of crude-oil production. p.48

Nafta. (Instytut Naftowy)  
Krakow, Poland. Vol.5, no.2, Feb.1959

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

WILK, Zdzislaw, prof., mgr., inz.

Safety coefficient against gas explosion. *Nafta* 16 no.5:133-138 '60.

1. Akademia Gorniczo-Hutnicza.