

PASTYRIK, L.

Present problems of international relations in the  
field of biology. p. 397

BIOLOGIA . (Slovenska akademia vied) Bratislava CZECHOSLOVAKIA

Vol. 10, No. 4, 1955.

SOURCE: East European Accessions List (EEAL) Library  
of Congress, Vol 5, No. 1, January, 1956.

PASTYRIK, I.

Experience acquired during a study trip to Russia. p. 636. (Biologia, Vol. 11, No. 10, 1956, Bratislava, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 8, Aug 1956. Uncl

PASTYRIK, L.

Another report on the effect of granulated superphosphate on the potato yield. p. 47. BIOLOGIA. (Slovenska akademja vied)  
Vol. 11, no. 1, 1956.

SOURCE:

East European Accessions List, (EEAL) Library of Congress Vol. 5,  
No. 8, August 1956.

A. W. P., 1.

Index: East European Acquisitions List, (EEAL), Library of Congress  
Electronic Journals (EJOL), (Shannon, Ireland) 1996  
Vol. 1, no. 1, 1996.

Source: East European Acquisitions List, (EEAL), Library of Congress  
Vol. 5, no. 12, December 1996.

PASTYRIK, L.  
CA

The function of trace elements in the nutrition of plants  
Pavel Nemeček, Ludovít Pastyrik, and Robert Nádvozník  
(Slovak Tech. Univ., Bratislava, Czech.). *Chem.  
Zvesti* 4, 149-68(1950).—MK-49, composed of 10 parts  
B, 7 Mn, 1 Cu, 1 Zn, 0.05 I, 0.05 Br, 0.1 Ti, 0.05 Sn,  
0.05 Li, 0.1 Ni, 0.1 Co, and 250 citric acid or NH<sub>4</sub> citrate  
and superphosphate and further dild. by superphosphate  
in the ratio 1:0.00 was prepd. The increase in growth  
and no. of the leaves in the seedlings of *Prunus avium*  
and *Prunus insubrica* was observed if cultivated on the  
fields fertilized by MK-49. *Prunus insubrica* showed a  
direct dependence of the growth and no. of the leaves on  
the amt. of added trace elements. Jan Mikša

CA PASTYRIK, L.

110

**The function of trace elements in the nutrition of plants.**  
 II. P. Nemes, L. Pastyrik, M. Tesdova, A. Luv, and J. Votisek (Slovak Tech. Univ., Bratislava, Czech). *Chem. Zvesti* 5, 251-7 (1951); cf. C 4 44, 10812g. The favorable influence on the growth of *Prunus insidiosa*, *Malus sibirica*, and *Pyrus communis* of trace elements, applied in the form ME-10 (C 4 44, 10801g) is carried through into the following period of vegetation, even into the following year, if the optimal dosage is used. In the test plants with the

optimal dosage of I, the increase in growth is doubled even in the second year after application and the thickness and no. of leaves and roots are increased. I decreases the frequency of diseases and improves the physiol. condition. I prolongs the vegetation period of *Prunus insidiosa* and increases the callus formation in *Rosa polyantha*, *Lorrea californica*, and *Chamaecyparis obtusa* var. *tetragona*. III. P. Nemes, J. Votisek, L. Pastyrik, and R. Nadvornik (Slovak Tech. Univ., Bratislava, Czech). *Ibid.* 272-32. Expts. with tomato plants (*Solanum lycopersicum*) indicate that such important production factors as fertility, the formation of sugar, size of the fruit, health of the plant and the fruit, and the yield are dependent on the presence of trace elements derived from ME-50. ME-50 is substituted by H from 10 to 5 parts. The physiol. factors are affected by trace elements, are dependent on each other. Lab. expts. as well as practical tests in agriculture show that the use of a complex of trace elements, and not individual elements, is necessary. Jan Micky.

**Effect of organic acids** (abstr.)

102770510000

Ludovic FAJFRLIK, Director (President) Biological Institute of the  
Slovak Academy of Sciences of the Czechoslovak Academy of Sciences  
(Biologie) ústav biologie akadémie vied SAV Bratislava  
Katedra vegetácie a ornitologie.

The Biological Institute of the Slovak Academy of Sciences, Bratislava, Czechoslovakia, is  
represented by Prof. Dr. Ludovic FAJFRLIK, Director.

Prof. Dr. Ludovic FAJFRLIK, Bratislava, Czechoslovakia, 82 45

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restrictions, it is shown sender's name and address.

1/1

PASTYRIK, I.

"Objectives of Biology in Slovakia." p. 9. Bratislava, Vol. 6, 1951.

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



PASTYRIK, L.

"Experiences with mechanical grafting of grapevines." (p.19). BIOLOGICKY SBORNÍK.  
(Slovenska akademia vied a umeni) Bratislava. Vol. 7, No. 1/2, 1952.

SO: East European Accessions List, Vol 3, No 8, Aug 1954.

PASTYRIK, L.

Chemical Abstracts  
May 25, 1954  
Biological Chemistry

3

✓ Biological effect of some microelements. L. Pastýrik and O. Lešková (Slovenská Univ., Bratislava, Czech.). *Chem. Zvesti* 7, 359-66(1953).—An addn. of a mixt. of microelements "ME-49" and "ME-50," in low concn. has a favorable stimulating effect on the vegetative development of radish (*Raphanus sativus*), while in high concn. it has retarding effect. The biometric evaluation is not as convincing as in the other plants. Cf. *C.A.* 46, 4066i, 4067a.  
Jan Micka

PASTRIK, Ludovit

65th birthday of Academician Sylvestr Prat. Biologia 15 no.11:  
877-878 '60. (KEAI 10:5)

(PRAT, SILVESTR) (CZECHOSLOVAKIA--PLANTS)

PASTYRIK, Ludovit

9th International Congress of Botany; a report. Biologia 15 no.2:  
150-155 '60. (EEAI 9:5)  
(International Congress of Botany, 9th Montreal, 1959)  
(Botany)

PASTYRZHIK, M.; LENART, I.; KOUBA, K.; PELISHEK, V.; LIVSHITS, Ya.L.,  
red.; ATROSHCHENKO, L.Ye., tekhn.red.

[Building of socialism in the Czechoslovakian Republic]  
Stroitel'stvo sotsializma v Chekhoslovatskoi Respublike.  
Moskva, Izd-vo "Znanie," 1959. 78 p. (MIRA 12:12)

1. Chlen TSentral'nogo Komiteta Kommunisticheskoy partii Chekhoslovakii; zaveduyushchiy otdelom partiynykh organov TSentral'nogo Komiteta Kommunisticheskoy partii Chekhoslovakii (for Pastyrshik).
  2. Chlen TSentral'nogo Komiteta Kommunisticheskoy partii Chekhoslovakii.; sekretar' TSentral'nogo Komiteta Kommunisticheskoy partii Slovakii (for Lenart).
  3. Zaveduyushchiy kafedroy politekonomii Vysshey partiynoy shkoly pri TSentral'nom Komitete Kommunisticheskoy partii Chekhoslovakii (for Kouba).
  4. Zamestitel' ministra shkol i kul'tury Chekhoslovatskoy Respubliki (for Pelishek).
- (Czechoslovakia--Economic conditions)

KIETA-FYDA, Aleksandra; PASYK, Stanislaw; SOSIN, Marian

A syndrome of gastro-intestino-colic fistula (observation on 2 cases). Polski tygod.lek.15 no.10:365-367 7 Mr '60.

1. Z I Kliniki Chorob Wewnetrznych A.M. w Krakowie; kierownik: prof.dr, Leon Tochowicz.

(GASTRIC FISTULA etiol.)

(FISTULA INTESTINAL etiol.)

(STOMACH surg.)

PASIKOVA, L.E. , LIBERMAN, V.A.

"Methods for Controlling Irradiation by Radioactive and  
Radioactive Substances Near Apparatus Used in  
Radiotherapy Divisions". p.140.

Trudy Vsesoyuznoy Konferentsii po Meditsinskoj Radiologii  
(Voprosy Gigieny i Dozimetrii) Medgiz, 1957, Moscow Russian, OK.

Proceedings of the All-Union Conference On Medical Radiology  
(Hygienic and Dosimetric Problems)

PASTYRAK, LUDOVIT

CZECH

ry

Influence of trace elements on the formation of callus and the growth of grafts of the grapevine (*Vitis vinifera*). Ludovít Pastyřák (Slov. Univ., Bratislava, Czech.). *Biologie* 9, 117-21(1954).—Mist. of elements designated as M16-40 (cf. C.A. 44, 10810g) supplied in the form of solns. (75 g. and 150 g./sq.m.) increased the no. of grafts by 6.3% as compared with water controls, whereas in controls with pure soln. of superphosphate a 10.48% fall was observed. L. J. Urbánek



PASKVAN, R.

Development and problems of the struggle against hail. p. 386.

Periodical: POLJOPRIVREDNI PREGLED.

Vol. 7, no. 9/10, Sept./Oct. 1958.

AGRICULTURE

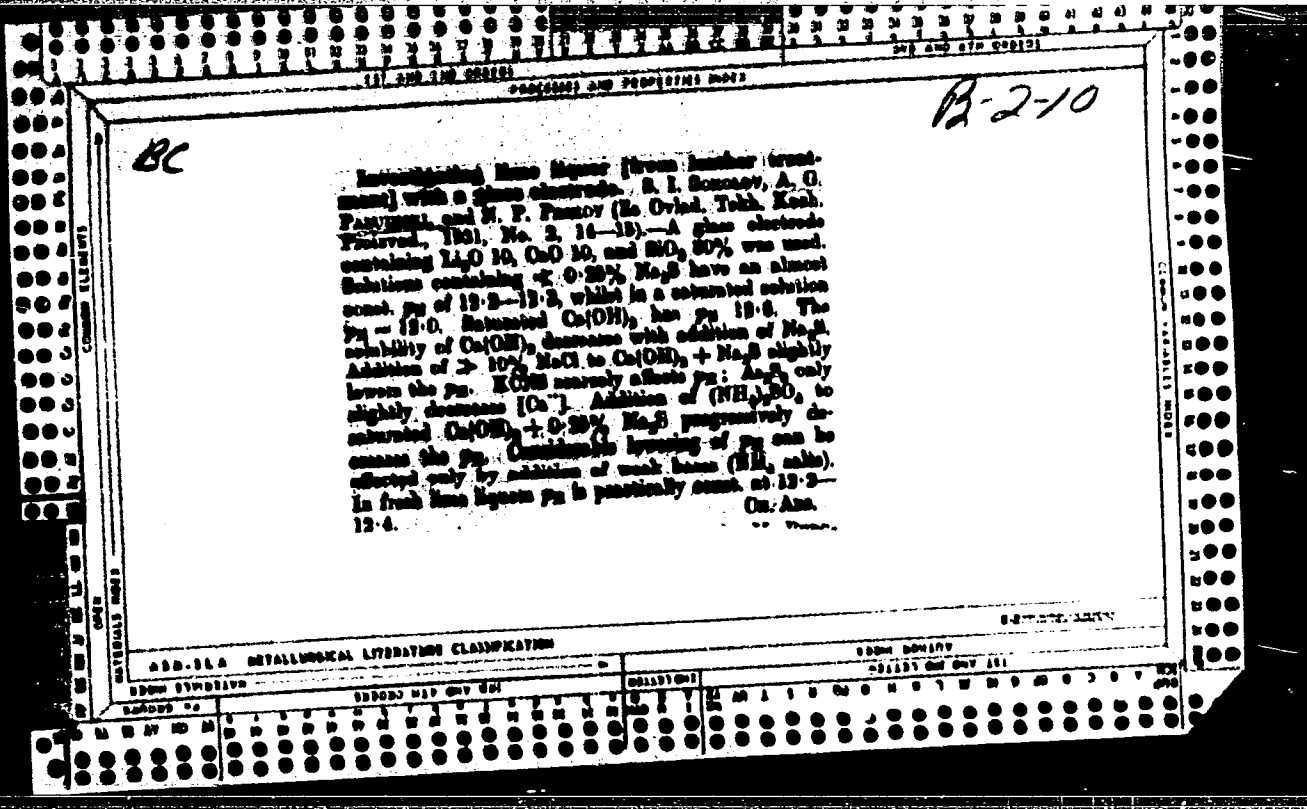
SO: Monthly List of East European Accessions (EEAI) LC

Vol. 8, No. 4  
April 1959, Uncl.

PASTWA, H.

Penicillin sensitization. Przegł. derm., Warsz. 1 no.2:182-188 Sept  
1951. (CIML 23:2)

1. Of the Ambulatorium (Head--T. Jarninski, M.D.) of Warsaw Municipal  
Hospital No. 2 (Director--Prof. B. Michalowski, M.D.)



Velocity of propagation of ultrasonic waves in colloidal solutions. A. Dymowski, *Acta Physicochim. U. R. S. S.* 3, 779 83 (1935) (in German). The velocity of sound was measured by means of an acoustic interferometer, in which a standing wave was formed between the surface of a quartz plate under pressure and a reflector that could be moved by means of a micrometer screw. A wave length of 294.5 m. was used for all of the measurements. An electrostatic voltmeter, connected in a resonance circuit, was used as a registering instrument. The potential on the cover of the quartz plate was about 100 v. and the positions of the minima could be read to 0.005 mm. The adiabatic modulus of elasticity,  $E = \rho d$ , in which  $\rho$  is the velocity of sound and  $d$  is the  $d$  of the soln., was calculated. Measurements were made on  $H_2O$ ,  $MgCl_2$ ,  $CaCl_2$ ,  $H_2O$  and  $NaCl$  solns. contg. 2.65, 21.25%  $NaCl$  and the results compared with earlier data. Measurements on  $Fe(OH)_3$  sol showed that a slight increase of  $E$  takes place on aging. In sols of crepe rubber in  $CaCl_2$  there is a slight decrease in  $E$  with concn., probably due to the small velocity of sound in solid rubber (less than 100 m.). Data are given also for nitrocellulose in acetone and gelatin in water, which show very little change of  $E$  with concn.

E. R. Rushton

ASD 514 METALLURGICAL LITERATURE CLASSIFICATION

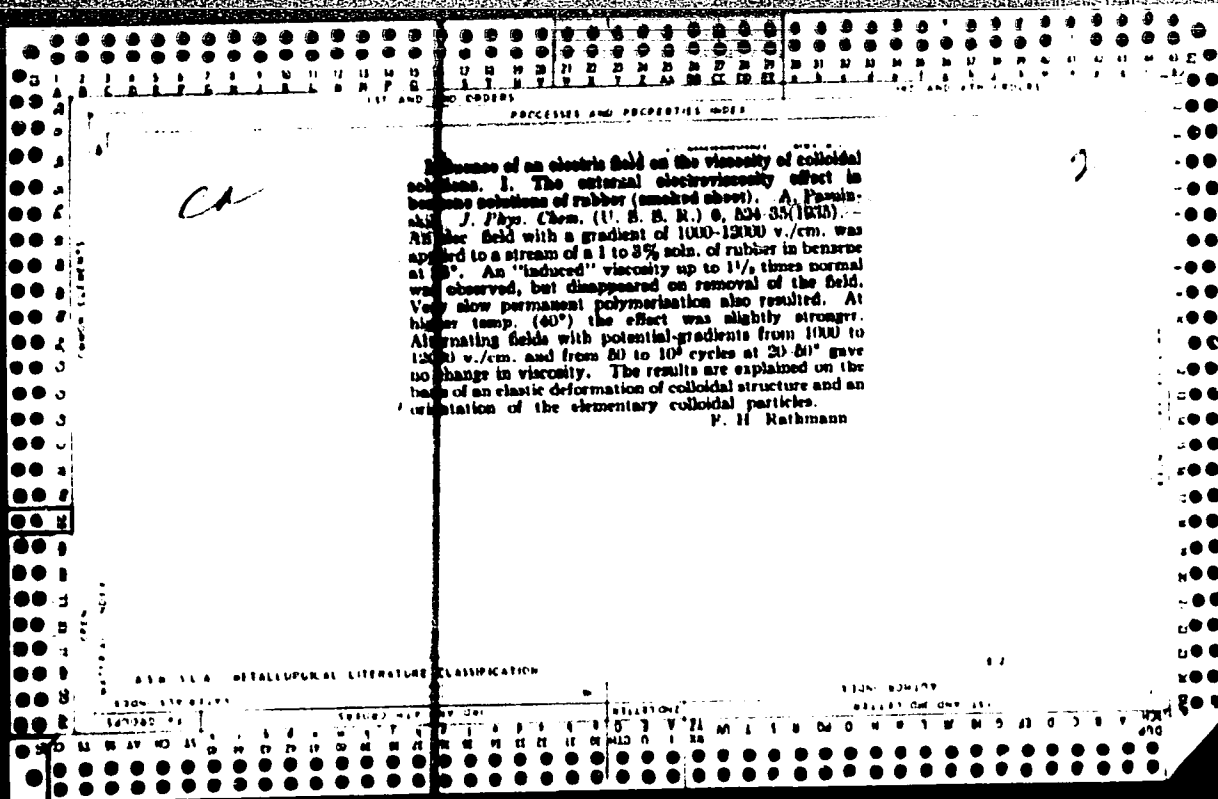
PROCESSED AND PRESERVED UNDER  
1ST AND 2ND GROUPS

2

Measuring  $pH$  in gelatin solutions. I. Petrov and A. B. Buzdakov. *J. Applied Chem. (U. S. S. R.)* 8, 165-70 (in French) (1955).—Expts. were performed with gelatin "Schweinfurter 4004" (Deutsche Gelatine Fabrik) and "TRIZHIN 400" (Russian product) in two concns. with and without buffer solns. at various  $pH$  values. All measurements were made by three electrometric methods (hydrogen, quinhydrone and glass electrodes) and two colorimetric methods (Michaelis, and Clark and Lubs), the measurements with the glass electrode being accepted as standard measurements. In all the buffer solns. of gelatin the av. deviation of the electrometric methods amounted to  $\pm 0.05 pH$  and for the colorimetric  $\pm 0.1 pH$ . In non-buffer solns. of gelatin the agreement between the results obtained by various methods depends on the purity of the gelatin. Deviations in purified gelatin for electrometric measurements amounted to  $\pm 0.15 pH$  and for the non-purified  $\pm 0.25 pH$ , and  $\pm 0.15 pH$  and  $\pm 0.50 pH$  corr. for colorimetric methods. Seven references. A. A. Boshlingk

METALLURGICAL LITERATURE CLASSIFICATION

E 2



PROCESSING AND PROPERTIES INDEX

23

OX

Falling-ball method of determining the viscosity of cellulose nitrate solutions. A. Pasunskii. *Photo-Kino Ind.* 1934, 75 7. A theoretical article deals with the application of Stokes' law and Ladenburg's formula. A simple, practical formula applicable to the app used is given. C. F. K. Mees

ASB-554 METALLURGICAL LITERATURE CLASSIFICATION

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	00
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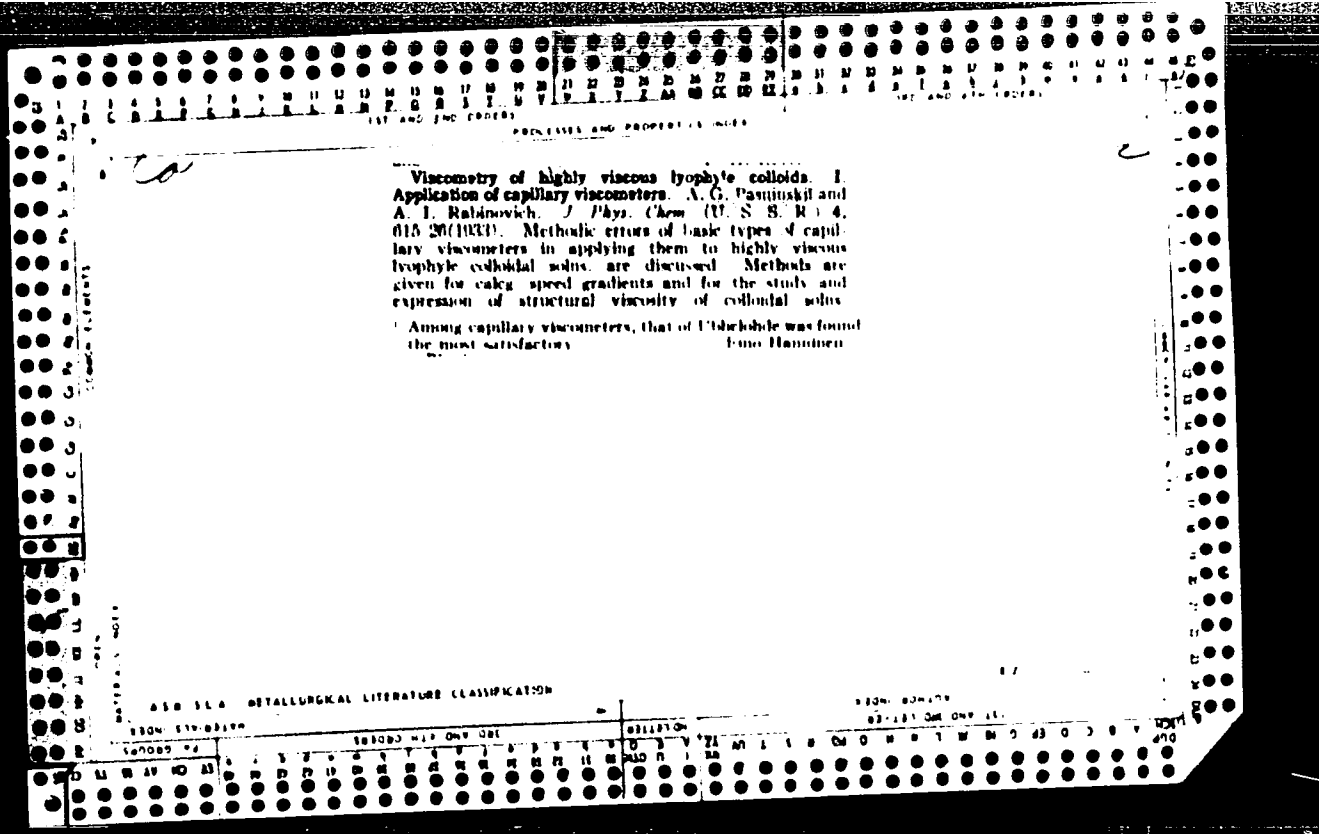
*ca*

Investigating lime liquor with a glass electrode. S. I. SOKOLOV, A. G. PASTUSKI, AND N. P. PISKOV. *Zh. Obshchei Khimii* **1931**, No. 2, 14-15. A glass electrode contg. 10% Li<sub>2</sub>O, 10% CaO and 80% SiO<sub>2</sub> was found suitable for  $p_H$  detns. in lime liquor from leather treatment. Solns. contg. not less than 0.25% of Na<sub>2</sub>S have an almost const.  $p_H$  value of 12.2 to 12.3, while in a satd. soln. the  $p_H = 12.0$ . In satd. solns. of Ca(OH)<sub>2</sub>,  $p_H = 12.0$ , and solns. of  $p_H = 12.4$  are obtained by addn. of varying amounts of Na<sub>2</sub>S. The soln. of Ca(OH)<sub>2</sub> decreases gradually with the increase in the concn. of Na<sub>2</sub>S. A slight lowering of  $p_H$  is observed upon the addn. of up to 10% of NaCl to Ca(OH)<sub>2</sub> + Na<sub>2</sub>S. The content of Ca ions increases gradually with the addn. of NaCl. Addn. of KCNS has almost no effect on  $p_H$ , causing only a small increase in the ionization of Ca. As<sub>2</sub>S<sub>3</sub> causes only a small decrease (0.3) in the ionization of Ca. The addn. of increasing amts. of (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> to a satd. soln. of Ca(OH)<sub>2</sub> contg. 0.25% Na<sub>2</sub>S progressively decreased the  $p_H$  value. The content of Ca ions in solutions also increases with increased concn. of (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>. Thus a considerable lowering of  $p_H$  and consequently a free adjustment of the active alk. of lime liquors can only be effected by the addn. of weak bases such as NH<sub>3</sub> salts. In fresh lime liquors  $p_H$  is practically const. at 12.2-12.4. A. A. BOEHLINGER

ASD 114 METALLURGICAL LITERATURE CLASSIFICATION

SEARCHED	SERIALIZED	INDEXED	FILED	DATE	BY	CLASS.	EXT.	REMARKS





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

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

PROCESSES AND PROPERTIES INDEX

ca

2

The viscometry of highly viscous lyophilic colloids.  
 II. Application of viscometers based on Stokes' law.  
 A. G. Puzinokh and A. I. Rabinovich. *J. Phys. Chem.*  
 (U.S.S.R.) 8, 821-33(1934); cf. C. A. 28, 1111. The  
 difference in values obtained by the capillary and falling-  
 sphere viscometers is due to differences in the velocity  
 gradients. After correction for these, the two methods  
 give concordant results. Data are given for the viscosity  
 of various 10-20% nitrocellulose sols. V. H. R.

ASD 314 METALLURGICAL LITERATURE CLASSIFICATION

62

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

The glass electrode. S. I. Sokolov and A. H. Pautirskii. *Otdelnie Tekhnicheskie Kachestvennoe Primenenie* 1931, No. 2, 22-3; cf. C. A. 20, 4909. - The reliability of the glass electrode above  $p_H$  9 is questionable; it depends on the ions of alkali metals present in the soln. Electrodes were prepd. of the following compns.: Li<sub>2</sub>O 10, CaO 10, SiO<sub>2</sub> 80%; Na<sub>2</sub>O 20, CaO 8, SiO<sub>2</sub> 72%, K<sub>2</sub>O 25, CaO 10, SiO<sub>2</sub> 65%.  $p_H$  measurements of these electrodes were made in solns. of LiOH, NaOH, KOH, RbOH and CsOH of various concns. Up to  $p_H = 10$  there is a direct relationship of the potential to the  $p_H$  of the soln. For Li and Na glass the deviation sets in at about  $p_H = 11.5$  and 11.0. The Li-glass electrode shows a drop toward the abscissa in LiOH solns. and some decline for NaOH and no deviations for solns. of KOH, RbOH and CsOH. The Na-glass electrode shows a drop in solns. of LiOH and NaOH and a minor deviation in KOH, RbOH and CsOH. The K-glass electrode has a drop in LiOH and NaOH solns. and a considerable deviation (the curve running almost parallel to the abscissa) in KOH and a much smaller deviation in solns. of RbOH and CsOH. Thus the Li-glass electrode appears to be most reliable in the absence of Li and Na ions, although measurements may be effected in the presence of Na ions provided the electrode is properly calibrated.

A. A. Bochtling

450 51A METALLURGICAL LITERATURE CLASSIFICATION

8304 119 0118  
107380

PASUKHINA, A., sud'ya respublikanskoy kategorii

Thirty minutes under parachute canopy. Kizl. rod. 15 no.5:17  
My '64. (MIRA 17:8)

PASUKHINA, A.; L'VOV, V.

Here they like sport. Zhil.-kom. khoz. 13 no.1:22-23 '63. (MIRA 16:3)

1. Neshtatnyy korrespondent zhurnala "Zhilishchno-kommunal'noye khozyaystvo".

(Moscow—Sports)

PASUL'KO, I.I.; NAUMOV, M.I.

Modern gully erosion phenomena in Transcarpathia and several  
measures for controlling them. Geog. sbir. no.7:114-118 '63.  
(MIRA 17:12)

KUZIN, I.L.; PASUMANSKIY, I.M.; PERUGIN, N.N.; CHOCHIA, N.G.

Some methods for determining recent tectonic movements in oil-bearing platform areas. Trudy VNIGRI no.225:192-205 '63.

(MIRA 17:3)

KOGAN, A.B.; PASUMANSKIY, I.M.

New data on the tectonics of the southern Mangyshlak Peninsula.  
Trudy VNIGRI no.131:287-296 '59. (MIRA 12:9)  
(Mangyshlak Peninsula--Geology, Structural)



PASUNKOVA, N.N.

Data on the problem of inheritance of blood groups in man. Akt.vop.  
perel.krovi no.4:111-113 '55. (MIRA 13:1)

1. Severo-Osetinskaya Respublikanskaya stantsiya perelivaniya krovi.  
(DZAUDZHIKAU--BLOOD GROUPS)

CA

Electrically-heated fumigators. Hellux Glühlampen-  
Neon- und Radioröhrenfabrik A. Pasut. Austrian 171,997.  
June 25, 1952. The fumigator consists of a normal but per-  
forated glow-lamp body. In the interior there is a fireclay  
disk or the like bearing the solid or liquid fumigants (D.D.T.)  
which is heated by a resistance coil. F. Epstein

S/145/61/000/007/006/009  
D221/D301

AUTHOR: Pasutman, B.V., Aspirant

TITLE: Method of design for stressed cylindrical helical  
compression springs of minimum weight

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Mashinostroyeniye,  
no. 7, 1961, 71-77

TEXT: The design of prestressed springs is reduced to that of springs where the maximum specified load stress  $\tau_{pmax} = 40$  instead of the maximum allowed stress is used. This permits determination of the parameters, provided the minimum load  $P_{min}$  and working stroke,  $\lambda$ , are given. The magnitude of  $\tau_{pmax}$  is proportional to the moment of inertia of the area under the curve  $\tau = f(\gamma)$  in relation to the axis of  $\tau$  in the diagram of deflection without hardening. This leaves a reserve of  $\tau_{pmax}$ . After analysis of the relationship between  $\tau$  and the angular

Card 1/1

Method of design ...

S/145/61/000/007/006/009  
D221/D301

deformation of the cross section  $\gamma$ , and designation of the ratio of the elastic nucleus and wire diameters by  $\beta$ , Eq. (13)

$$\tau_{pmax} = \tau_s \left( \frac{4}{3} - \frac{\beta^3}{3} \right)$$

is obtained. In the above,  $\tau_s$  is the yield limit on shear for the material. The consideration of strength and reliability requires that  $\beta$  should be over 0.5. Assuming  $\beta = 0.5$ , then  $\tau_{pmax} = 1.29 \tau_s$ . When the coefficient of stress concentration is  $k = 1$ , and  $\tau_{max} = \tau_{pmax}$ , the weight of spring is given by Eq. (16)

$$Q = 2G\gamma_1 \frac{(P_{min} + Z t_{pab})^2}{\tau_{pmax}^2 Z} = 10^6 t_{on} \gamma_1 c^3 \cdot \frac{P_{min} + Z t_{pab}}{\tau_{pmax}^2} \quad (16)$$

where  $G$  is the shear modulus;  $\gamma_1$  is the specific weight of spring

Card 2/4

S/145/61/000/007/006/009

D221/D301

Method of design

material,  $Z$  the spring stiffness;  $\lambda_{\text{wor}}$  its working stroke,  $\xi$  a coefficient of the construction of turns;  $i_w$  the number of active turns;  $c$  the spring index,  $P_{\text{min}}$  the minimum load. The author recommends L. B. Tevelev's equations (Ref. 5 Vestnik mashinostroyeniya, no. 10 1959) for determining optimum stiffness and other parameters of springs. A detailed account of the calculation procedure is given. The reserve of strength is characterized by  $\eta = \ell \beta$ , where  $\ell = \frac{\gamma_f}{\gamma_s}$ . In the latter

$\gamma_f$  is the maximum deflection corresponding to the instant of failure and  $\gamma_s$  is the angle of deflection of the yield limit,  $\gamma_s$ . The comparison of weights of prestressed and non-stressed springs of similar optimum stiffness  $Z$  is about 1.5, according to the quoted equations, although the computations indicate that the prestressed spring is 2-3 times lighter than the corresponding unit without preload. There are 1 table and 6 Soviet bloc references.

Card 3/4

Method of design

S/145/61/000/007/006/009  
D221/D301

ASSOCIATION: Bryanskiy institut transportnogo mashinostroyeniya  
(Bryansk Institute of Transportation Engineering)

SUBMITTED October 15 1960

Card 4/4

IASUTAL, P. H., and .

Graphic construction of the diagram of nominal tangential stresses  
in calculating compressed springs and torsion bars. Vest.  
mashinostr. 45 no.1:38-39 Ja '65. (MIRA 18, 3)

PASUTMAN, B.V., inzh.

Effect of coil curvatures on the fatigue resistance of  
compressed springs. Vest. mashinostr. 44 no.5:26-28 My '64.  
(MIRA 17:6)



PASUTMAN, B.V., aspirant

Calculating strained cylindrical spiral compression springs with  
a minimum weight. Izv.vys.ucheb.zav.; mashinostr. no.7:71-77 '61.  
(MIRA 14:9)

1. Bryanskiy institut transportnogo mashinostroyeniya.  
(Springs (Mechanism))

Experiments with rotary brush air conditioning. Hidrologiai  
kozlony 37 no.1433 '57.

PASVEER, A.

HUNGARY  
NETHERLANDS

PhD

Head of the laboratory in the Department of Protection  
from Air-, Water-, and Soil-contamination in the  
Dutch Health Research Institute (Holland Egeszsegugyi  
Kutato Intezet Levegő-, Viz- és Talajszennyezéselleni  
Védelem osztálya)

Budapest, Hidrologiai Közöny, No 5, Oct 62, pp 416-420.

"Two New Trends in the Development of the Activated  
Sludge Method of Sewage Treatment."

PASVER, A.

Experiments with airing installations with rotary brushes.

P. 33, (Hidrologial Kozlony) Vol. 37, no. 1, 1957, Budapest, Hungary

SO: Monthly Index of East European Accessions (E:AI) Vol. 6, No. 11 November 1957

PASVIK-KHLOPINA, M.A.  
(PASVIK, M.A.)

Deceased

Geochemistry

See ILC

**KHUDAK, Z.I.; PASVOL'SKAYA, D.S., kand.tekhn.nauk**

Methods for preparing the balance sheets of raw materials,  
production and consumption of fur goods. Kozh.-obuv. prom. 2  
no. 11:4-6 N '60. (MIRA 13:12)

1. Rukovoditel' laboratorii ekonomicheskikh issledovaniy (for  
Khudak).

(Fur)

FASYECHNIK A.M.

25 70

Sm. 25 70 ryeaktsiya gladkoy muskulatury na baktyerial'nyye endotoksiny. 500 Bsh.  
I.A.M. ~~pas~~yechnik. Ryeaktsiya gladkoy muskulatury kishyehnika em-brionov i novo-  
rozhdnyykh zhyvotnykh na brutsyelyeenyy i bryushnotifoenny endotoksiny. Mikrobiol.  
Zhurnad, t. xi, vyg. 2, 1949, S. 63-71.--na ukr. Yae.--Ryeeyunye na rus yae.- Bibliogr.  
22 naev.

So: Letopis' No. 34

CZUBAK, Eugeniusz; PASYK, Krystyna

Removal of nail bodies with barium sulfide in treatment of onychomycosis.  
Przegl. dermat., Warsz. 8 no.6:627-632 1958.

1. Z Kliniki Dermatologicznej A. M. w Krakowie Kierownik: prof. dr K.  
Lejman. Adres: Krakow, Klinika Dermatologiczna Akademii Medycznej, ul.  
Kopernika 17.

(NAILS, dis.

onychomycosis, ther. removal of nail bodies with barium sul-  
fide (Pol))

(SULFIDES, ther. use

barium sulfide removal of nail bodies in onychomycosis (Pol))

(BARIUM, ther. use

same)

(FUNGUS DISEASES, ther.

same)

PASYK, Stanislaw; HORZELOWA, Jolanta

A case of unusual hypertension of the right ventricle. Pol.  
tyg. lek. 19 no.23:879-880 1 Je '64

1. Z I Kliniki Chorob Wewnetrznych Akademii Medycznej w  
Krakowie (kierownik: prof. dr. Leon Tochowicz) i z Kliniki  
Chorob Dzieci Akademii Medycznej w Krakowie (kierownik: prof.  
dr. Tadeusz Giza).



PASYK, Stanislaw

Treatment of myocardial infarct with special reference to shock. Wiad. lek. 18 no.4:281-286 15 F '65

1. Z I Kliniki Chorob Wewnetrznych Akademii Medycznej w Krakowie (Kierownik: prof. dr. L. Tochowicz).

PASYK, Stanislaw; DUBIEL, Jerzy

Heart sounds in cases of pulmonary hypertension. Pol. tyg. lek.  
20 no.12:424-426 22 Mr '65

1. Z I Kliniki Chorob Wewnętrznych Akademii Medycznej w  
Krakowie (Kierownik: prof. dr. Leon Tachowicz).

PASYK, Stanislaw; 1971, 1972

Evaluation of the "gyroscopic test" in myasthenia gravis. *Prac. lek.* 1971, 13: 15-17, 13: 17-19.

1. 7 I Kliniki Ciężkiej Neurologii, Akademii Medycznej w Krakowie (Kierownik: prof. dr. Leon Jędrzejak).

PASYK, Stanislaw; HATCH, Fryderyk T.

Effect of pulmonary blood flow on the behavior of lipids in the peripheral blood studies in a patient with occlusion of the superior vena cava. Pol. tyg. lek. 18 no.50:1876-1878 9 D'63

1. Z I Kliniki Chorob Wewnetrznych AM w Krakowie (kierownik: prof.dr. Leon Tochowicz) i z Oddzialu Przemiany Materii Ogolnego Szpitala w Bostonie (kierownik: prof.dr. F.T.Hatsch).

\*

TOCHOWICZ, Leon; PASYK, Stanislaw; DENIKIEWICZ, Wladyslaw

Estimation of the value of the examination of cholesterol and nutritional lipemia in atherosclerosis. Polski tygod. lek. 15 no.20:737-742 16 My '60.

1. Z I Kliniki Chorob Wewnetrznych A.M. w Krakowie; kierownik: prof. dr. Leon Tochowicz.

(ARTERIOSCLEROSIS blood)

(CHOLESTEROL blood)

(LIPIDS blood)

PASYK, Stanislaw; DUBIEL, Jerzy

Advances in the treatment of arrhythmias and conduction disturbances in myocardial infarction. Wiad. lek. 18 no. 19:1499-1503 1 Q '65.

I. Z I Kliniki Chorob Wewnetrznych AM w Krakowie (Kierownik: prof. dr. L. Tochowiec).

PASYK, Stanislaw; DUBIEL, Jerzy

Clinical course and mortality in patients with mitral valve insufficiency. Pol. tyg. lek. 20 no.32:1196-1198 9 Ag '65.

1. Z I Kliniki Chorob Wewnętrznych AM w Krakowie (Kierownik: prof. dr Leon Tochowiec).

PASYK, Stanislaw; DUBIEL, Jerzy; TRZNADEL, Wladyslaw

Statistical evaluation of acquired heart defects. Pol. Wg. Lek.  
20 no.34:1275-1276 23 Ag '65.

1. Z I Kliniki Chorob Wewnetrznych AM w Krakowie (Kierownik: prof.  
dr. Leon Tochowicz).



SZYBINSKI, Z.; HORZELA, T.; PASYK, S.; KONTUREK, S.

Application of the quantitative radiocardiography in hemodynamic studies. Kardiol. Pol. 8 no.3:251-255 '65.

1. Z I Kliniki Chorob Wewnetrznych AM w Krakowie (Kierownik: prof. dr. I. Tochowicz).

TOCHOWICZ, Leon; PASYK, Stanislaw; DUBIEL, Jerzy

Clinical course of mitral stenosis in 413 patients treated conservatively. Pol. arch. med. wewnet. 35 no.7:993-998 '65.

I. Z I Kliniki Chorob Wewnetrznych AM w Krakowie (Kierownik: prof. dr. med. L. Tochowicz).

Country : POLAND  
Category: Organic Chemistry. Organic Synthesis

Abs Jour: RZhKhim., No 17, 1959, No. 60759

Author : Malinowski, S.; Benbenek, S.; Paśynkiewicz, J.;  
Wojciechowska, E.

Inst : -

Title : Study of the Aldol Reactions in Gaseous Phase. V.

Orig Pub: Roczn. chem., 1958, 32, No 5, 1089-1096

Abstract: Investigated are effects of temperature, nature and dosage of catalyst (silica gel precipitated from a water solution of water glass by means of  $H_2SO_4$  at pH of 8-9, or silica gel, containing 1% NaOH, KOH or RbOH, obtained by mixing of 135 gr of silica gel and 135 ml of 1% caustic solution with the consequent drying in vacuum at approx.

Card : 1/3

G-3

KROL, Wladyslaw; PASYK, Stanislaw

Auscultation phenomenon in hypertension. Pol. tyg. lek. 20  
no.10:342-344 8 Mr '65.

1. Z I Kliniki Chorob Wewnetrznych Akademii Medycznej w  
Krakowie (Kierownik: prof. dr. Leon Tochowicz).

TOCHOWICZ, Leon; PASYK, Stanislaw; DENIKIEWICZ, Wladyslaw

Cholesterol and turbidity of the blood in patients with myocardial infarct and hypertension. Polskie arch.med.wewn. 30 no.7:931-932 '60.

1. Z I Kliniki Chorob Wewnetrznych A.M. w Krakowie Kierownik:  
prof. dr med. L.Tochowicz  
(CHOLESTEROL blood)  
(MYOCARDIAL INFARCT blood)  
(HYPERTENSION blood)

KIETA-FYDA, Aleksandra; PASYK, Stanislaw

Effect of phenylethylacetamide on pathologic serum turbidity.  
Polski tygod. lek. 16 no.16:584-587 16 Ap '61.

1. Z I Kliniki Chorob Wewnetrznych A.M. w Krakowie; kierownik:  
prof. dr Leon Tochowicz.

(PHENYLBUTYRATES pharmacol) (LIPIDS blood)

CHOLEWA, Leon; PASYK, Stanislaw

Value of Lassis' test in the diagnosis of pancreatic diseases.  
Polski tygod. lek. 16 no.39:1492-1493 25 S '61.

1. Z I Kliniki Chorob Wewnetrznych A.M. w Krakowie; kierownik:  
prof. dr Leon Tochowicz.

(PANCREAS dis) (SULFATES)

KIETA-FYDA, Aleksandra; PASYK, Stanislaw

Effect of the use of the vitamin preparation Lipobolit on the  
status of arteriosclerotic patients. Pol. tyg. lek. 19 no.3:  
94-97 20 Ja'64

1. Z I Kliniki Chorob Wewnetrznych AM w Krakowie; kierownik:  
prof.dr. Leon Tochowicz.

\*



TOCHOWICZ, Leon; PASYK, Stanislaw

Morbidity of myocardial infarction and mortality of surviving subjects.  
Polski tygod. lek. 16 no.31:1185-1190 31 J1 '61.

1. Z I Kliniki Chorob Wewnetrznych A.M. w Krakowie; kierownik: prof.  
dr Leon Tochowicz.

(MYOCARDIAL INFARCT statist)

DUBIEL, Jerzy; PASYK, Stanisław

Angiotensin. pol. ar. n. med. farm. 3. nr. 8. 1971 - 1972

1. Z I Kliniki Chorob wewnętrznych Akademii Medycyny w Warszawie  
(Kierownik: prof. dr. med. L. Jankowski)

PASYKOWA, Krystyna

Effect of the vitamin preparation Lipobolit on some skin diseases.  
Przegl. dermat. 52 no. 1:19-24 Ja-F '65.

1. Z Kliniki Dermatologicznej Akademii Medycznej w Krakowie  
(Kierownik: prof. dr. K. Lejman).

ADYKOWA, Krystyna

The distribution of ... region between 1918-1961. (Szczeg. ...)

1. Z Kliniki Dermatologicznej ... (Kierownik: prof. ...)

I. 08973-67

ACC NR: AP6022050

SOURCE CODE: UR/0146/66/009/003/0003/0009

AUTHOR: Pasyukev, V. V.; Savel'yev, B. Ye.; Shinkov, A. D.

32

ORG: Leningrad Electrotechnical Institute im. V. I. Lenin (Leningradskiy elektrotekhnicheskiy institut)

TITLE: Using an electric integrator for measuring carrier lifetime in transistors

SOURCE: IVUZ. Priborostroyeniye, v. 9, no. 3, 1966, 3-9

TOPIC TAGS: transistor, carrier lifetime

ABSTRACT: The use of an electric simulator for determining carrier effective lifetime and its dependence on transistor configuration and semiconductor parameters is considered. Assumptions: The barrier capacitance and generation-recombination effects are neglected; the level of injection of minority carriers into base is low. The simulation is based on the method of determining

Card 1/2

UDC: 621.382.333.3

L 08973-67

ACC NR: AP6022050

the lifetime from transient responses (B. Lax et al., J. Appl. Phys., 1954, v. 25, no. 9). The time of persistence of positive voltage across the junction upon a current reversal is measured. The techniques of using a Soviet-made electric integrator for the above purposes are described. It is claimed that the method permits finding the relations between the carrier effective lifetime in a transistor and the transistor geometry, volume lifetime, and surface recombination rate. Orig. art. has: 4 figures, 12 formulas, and 1 table.

SUB CODE: 09 / SUBM DATE: 07Jun65 / ORIG REF: 002 / OTH REF: 004

Card 2/2 not

L 09918-67 EWT(m)/EWP(t)/ETI IJP(c) JD/JG  
ACC NR: AP6033560 SOURCE CODE: UR/0181/66/008/010/2982/2985 74

AUTHOR: Kal'nin, A. A.; Pasyukov, V. V.; Tairov, Yu. M.; Yas'kov, D. A.

ORG: Leningrad Electrotechnical Institute im. V. I. Ul'yanov (Lenin) (Leningrad-skiy elektrotekhnicheskiy institut)

TITLE: Photoluminescence of silicon carbide containing a beryllium impurity

SOURCE: Fizika tverdogo tela, v. 8, no. 10, 1966, 2982-2985

TOPIC TAGS: photoluminescence, silicon carbide, beryllium, impurity, luminescence extinction, electron hole, luminescence

ABSTRACT: Beryllium when added to silicon carbide is shown to render the latter luminescent. Both electron- and p-type silicon carbide samples were found to luminesce. At the same time, the spectral radiation composition was found to vary. The activation energy required for the extinction of luminescence for electron- and p-type silicon carbide samples is about the same (approximately 0.32 ev). Electro-luminescent light sources were prepared in which electrons were injected into luminescent p-type silicon carbide samples. Orig. art. has: 3 figures. [Authors' abstract]

SUB CODE: 20/SUBM DATE: 16Mar66/ORIG REF: 005/OTH REF: 006/

Card 1/1

PASYNKEVICH, S.V.

Reactions of organoaluminum compounds with alkyl halides.  
Vysokom. soed. 5 no.10:1585-1586 0 '63. (MIRA 17:1)

1. Politekhnicheskiy institut, Varshava, Pol'sha.



KAZITSYNA, L.A.; PASYNKEVICH, S.V.; KUZNETSOVA, A.V.; REUTOV, O.A.

Synthesis, structure, and infrared spectra of aryl diazonium cadmium halides. Izv. AN SSSR. Otd. khim. nauk no. 10:1762-1767 0 '62. (MIRA 15:10)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.  
(Diazonium compounds—Spectra)

KAZITSYNA, L.A.; PASYNKEVICH, S.V.; KUZNETSOVA, A.V.; REUTOV, O.A.

Synthesis, structure, and infrared spectra of boron halides  
and aryl diazonium tetraphenyl borates. Izv.AN SSSR.Otd.-  
khim.nauk no.3:448-453 Mr '62. (MIRA 15:3)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.  
(Boron halides--Spectra) (Diazonium compounds--Spectra)

KAZITSYNA, L.A.; PASYNKEVICH, S.V.; REUTOV, O.A.

Synthesis and study of the structure of double diazonium salts  
of aluminum halides. Dokl. AN SSSR 141 no.3:624-627 N '61.

(MIRA 14:11)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
2. Chlen-korrespondent AN SSSR (for Reutov).  
(Diazonium compounds)  
(Aluminum halides)

PAWLIKOWSKI, T.; NACZYNSKI, Jerzy; PASYNKIEWICZ, J.

Review of publications on gas engineering. Gaz woda techn  
sanit 37 no.8:266-267 Ag '63.

WARCZEWSKI, J., mgr inz.; KALECKI, J.; PASYNKIEWICZ, J.

Review of publications. Gaz woda techn sanit 37 no.12:423, 3 of  
cover D '63.

GROSSMAN, Andrzej; PASYNKIEWICZ, Jadwiga

Oxidation of phenols in waters and sewages. *Koks* 9 no.2:55-62  
Mr-Apr '64.

1. Department of Technology of Water and Sewage, Silesian Technical  
University, Gliwice (for Grossman). 2. Central Laboratory of the  
Gas Industry, Warsaw (for Pasynkiewicz).

PASYNKIEWICZ, Jadwiga

Dephenolization of ammoniacal liquor by the steam method. Koks 6  
no.5:177-182 0 '61.

1. Centralne Laboratorium Gazownictwa.

(Phenol)

Distr: 4E20(j)

6  
2 May  
1

Aldeal reactions in the gaseous phase. V. Stanislaw Malinowski, Stanislaw Brubenski, Jadwiga Pasynkiewicz and Elzbieta Wocichowska (Politech. Warsaw). *Kocznik Chem.* 21, 1080-94 (1958) (English summary); cf. C.A. 52, 19917c. — The kinetics of reaction between HCHO (I) and acetone (II), MeEtCO (III), and MePrCO (IV) was studied at 200-300° with crude silica gel (V), V sand, with conc. water glass (VI), or V sand, with 1% soles, of NaOH, KOH, or RbOH as catalysts. Highest yields of Me vinyl ketone, similar for all the catalysts, except that with RbOH, where it was considerably higher (39.1%). The max. yield of *o*-methylvinyl Me ketone (reaction of I with III) was obtained at 280°, 30.5% with V and 27.6% with VI as the catalyst. The reaction of I with IV was investigated at 240-300° and the highest yield of *o*-ethylvinyl Me ketone was reached at 260° (22.6%), with V as the catalyst. A. Krasinski.

SR  
11

gg



PASYNKIEWICZ, J.: BORKOWSKI, B.

The influence of the naphthalene content of benzene on the amount of phenol extracted from water. p. 133.

GAZ, WODA I TECHNIKA SANITARNA. (Stowarzyszenie Naukowo-Techniczne Inzynierow i Technikow Sanitarnych, Ogrzewnictwa i Gazownictwa) Warszawa, Poland.  
Vol. 33, No. 3, March 1959

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

Uncl.

I 16141-66 EWP(j) RM/WR  
ACC NR. AP6005897 (N) SOURCE CODE: PO/0099/66/040/001/0001/0053

AUTHOR: Starowieyski, K.; Pasykiewicz, S.  
ORG: Department of Organic Technology I, Institute of Technology (Politechnika), Warsaw 47 B

TITLE: Structures and IR spectra of organoaluminum complexes with nitriles

SOURCE: Roczniki chemii - Annales societatis chimicae polonorum, v. 40, no. 1, 1966, 47-53

TOPIC TAGS: organoaluminum compound, nitrile, chemical compound, electron acceptor, benzonitrile, propionitrile, acetonitrile, trimethylaluminum, IR spectrum

ABSTRACT: The structure of organoaluminum complexes with benzonitrile, propionitrile, and acetonitrile, as well as the electron-acceptor character of the organoaluminum component were studied by IR spectroscopy. The organoaluminum-nitrile complexes were studied for the first time. Experimental results are shown in Table 1.

Card 1/2

L 16191-10

ACC NR: AP6005897

Table.1.  $C \equiv N$  stretching frequencies ( $cm^{-1}$ ) of free nitriles and their complexes with organoaluminium compounds (molar ratio 1:1)

Organo-aluminium compounds	$C_2H_5CN$	$\Delta\nu_{C \equiv N}$	$C_2H_5CN$	$\Delta\nu_{C \equiv N}$	$CH_3CN$	$\Delta\nu_{C \equiv N}$
	2227		2244		2255s, 2295m	
$(C_2H_5)_2Al$	2270	+43	2282	+38	2260m, 2302s	+47
$(C_2H_5)_2AlCl$	2282	+55	2302	+58	2269w, 2315s	+60
$C_2H_5AlCl_2$	2286	+59	2305	+61	2277sh, 2321s	+66
$(CH_3)_2Al$	2264	+37	2231	+45	2255s, 2237s	+42
$(CH_3)_2AlCl$	2279	+52	2306	+62	2255w, 2303s	+48
$CH_3AlCl_2$	2285	+58	2311	+67	2268vw, 2307s	+52
$AlCl_3$	2286		2313		2311s	

IR spectra in the region of  $C \equiv N$  stretching vibrations and structures of the complexes obtained are elucidated in the text, which is published in English in its entirety. Orig. art. has: 2 tables and 8 formulas. [EW]

SUB CODE: 07, 20 SUBM DATE: 23Feb65/ ORIG REF: 001/ OTH REF: 008/  
 SOV REF: 006/ ATD PRESS: 4204  
 Card: 2/2

NOWAKOWSKA, M.; DAHLIG, W.; PASYNKIEWICZ, S.; SZEWCZYK, H.

Copolymerization of ethylene with acrylonitrile. Polimery  
tworzą wiek 9 no.12:516-520 D '64.

1. Institute of Heavy Organic Synthesis, Blachowina Slaska  
(for Nowakowska and Szewczyk). 2. Department of Organic  
Technology 1 of the Warsaw Technical University (for Dahlig  
and Pasynkiewicz). Submitted May 15, 1964.

PASYNKEVICH, S.V. [Pasynkiewicz, S.]; MATSIASHEK, S.A. [Maciaszek, S.]

Reactions of triethylaluminum with benzonitrile. Izv. AN SSSR.  
Ser. khim. no.6:1118-1119 '65. (MIRA 18:6)

1. Politekhnicheskii institut, Varshava, Pol'sha.

ECKSTEIN, Z.; DAHLIG, W.; HETNARSKI, B.; PASYNKIEWICZ, S.

A new method of presenting organic mercury compounds. *Bul chim PAN* 8  
no.4:161-164 '60. (EEAI 10:9/10)

1. Instytut Chemii Organicznej PAN; Katedra Technologii Organicznej  
I, II Politechnika, Warszawa. Presented by T. Urbanski.

(Mercury organic compounds)

PASYNKIEWICZ, STANISLAW

Distr: 4E2c(j)/4E3b/4E3d

Reaction of aluminum organic compounds. I. Synthesis of ketones from acid chlorides and complex salts of ethylaluminum dichloride with sodium chloride. Włodzimierz Dahlis, Stanisław Pasynkiewicz, and Tadeusz Woinarowski (Politechnika, Wałsaw). *Raczniki Chem.* 34, 401-12(1980) (German summary). —  $\text{EtAlCl}_2 \cdot \text{NaCl}$  (I), used for catalytic polymerization of  $\text{C}_3\text{H}_4$ , was found to be active in synthesis of various ketones from acid chlorides at 20-30°. The reaction occurred according to  $\text{I} + \text{RCOCl} \rightarrow \text{EtCOR} + \text{AlCl}_3 + \text{NaCl}$ , and possibly by reaction with the solvent (*m*-xylene) in which I was dissolved,  $\text{ArH} + \text{RCOCl} \rightarrow \text{ArCOR} + \text{HCl}$ . Good yields were obtained if the org. radical at the CO group diminished the electrophilic character of the C atom in this group. A. Kreglesska

5  
1-BW(BW)  
2-JAJ(MB)(MAY)  
3

PANYNKIN, I. B., Stepanov, D. M., and others, "The effect of ..."

reactions of optical ...  
38 no. 1:67-72, '64.

1. Department of ...  
Leningrad.



PASYNKIEWICZ, Stanislaw; DAHLIG, Wlodzimierz; STARONIEYSKI, Kazimierz

Preparation of organoaluminum compounds. Pt. 4. Roczniki chemii  
36 no.11:1583-1592 '62.

1. Department of Organic Technology I, Institute of Technology,  
Warsaw.

PASYNKIEWICZ, Stanislaw; DAHLIG, Włodzimierz; WOJNAROWSKI, Tadeusz

Reactions of organoaluminum compounds. Pt. 3. Roczniki chemii 37  
no.1:31-43 '63.

1. Department of Organic Technology I. Institute of Technology,  
Warsaw.

PASYNKIEWICZ, Stanislaw; DAHLIG, Wlodzimierz; WOJNAROWSKI, Tadeusz;  
RADZIWONKA, Tadeusz

Reactions of organic aluminum compounds. Pt. 2. Roczniki chemii  
37 no.3:293-300 '63.

1. Department of Organic Technology I, Institute of Technology,  
Warsaw.

PASYNKIE WICZ, STANISLAW

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

5  
Ewl(dw)  
JAJ(RM)  
MJW(JD)(Rd)  
3

V The reaction of ethyl chloride with metallic aluminum in the gas phase. Włodzimirz Dahlig and Stanisław Pasynkiewicz (Politech. Warsaw). Roczniki Chem. 34, 749-50 (1960). Al reacts at 90-5° with EtCl in the presence of AlCl<sub>3</sub> to form C<sub>2</sub>H<sub>6</sub>, H<sub>2</sub>, HCl, and AlCl<sub>3</sub>, but no organoaluminum compds. Dry HCl reacts with EtAlCl<sub>2</sub> to give AlCl<sub>3</sub> and C<sub>2</sub>H<sub>6</sub>, which explains the formation of HCl as a by-product in the synthesis of I in the liquid phase.

27

A. Kreglewski

MW

PASYNKI E WIEZ) STANISLA W

7  
1-BW(BW)  
1-JAT(NB)  
3

Distr: 4E2c(j)/4E3b/4E3d

Preparation of organomercury compounds from mercury salts and organoaluminum compounds. Zygmunt Ekstein, Włodzimierz Dahlg, Bogumił Hetnarski, and Stanisław Paszviliewski (Publ. Org. Chem. Pol. Nu. Warsaw). *Przemysł Chem.* 39, 225-8 (1960) (English Summary).

Compds. of the type  $R_2Al$ ,  $R_2AlCl$ , and  $RAICl_2$  ( $R = Me$  or  $Et$ ) reacted with Hg salts to give corresponding org. Hg compds. in a high yield. The method was esp. valuable when  $EtAlCl_2 \cdot NaCl$  (I), a by-product in the manuf. of the catalyst for the low-pressure polyethylene, was used. I dissolved in most org. solvents, was easy to handle, and safe in use. To 112.8 g.  $HgCl_2$  (II) in 180 cc. xylene was added dropwise with stirring 78.8 g.  $EtAlCl_2 \cdot NaCl$  in 180 cc. xylene, the temp. raised to 45-50°, the whole stirred 30 min., kept 12 hrs. at room temp., treated with stirring with 300 cc.  $H_2O$  at 40°, the ppt. filtered off, washed with  $H_2O$  and  $EtOH$ , and dried to yield 100.5 g.  $EtHgCl$  (III). To 21.4 g. II in 60 cc.  $C_6H_6$ , was added dropwise during 12 min. 3 g.  $Et_2Al$  in 10 cc.  $C_6H_6$ , and the temp. raised from 21 to 48°. After 12 hrs., 10 cc. concd. HCl in 40 cc.  $H_2O$  was

added dropwise, the ppt. filtered off, dried, and recrystd. from dil.  $EtOH$  to yield 16.5 g. III. III was similarly prepd. from  $Et_2AlCl$  and  $EtAlCl_2 + Et_2AlCl$ . To 31.6 g. II in 160 cc.  $C_6H_6$  was added dropwise with stirring 3.8 g.  $Hg_2Cl_2$  in 80 cc.  $C_6H_6$  (the temp. was kept below 50°), the whole stirred 30 min., kept 4 hrs. at room temp., treated with 20 cc. concd. HCl (the temp. as before), the  $C_6H_6$ -layer sep'd. and the  $H_2O$  layer extd. with 20 cc.  $C_6H_6$ , evapd., the ppt. filtered off, washed with  $H_2O$  and dried to yield 28 g.  $MeHgCl$  (IV). IV was similarly prepd. from  $Me_2AlCl$  and  $MeAlCl_2$ . To 33.5 g.  $Hg(OAc)_2$  in 80 cc.  $C_6H_6$ , was added dropwise with stirring 4.4 g.  $Et_2Al$  in 20 cc.  $C_6H_6$ , with the temp. kept below 50°. After 12 hrs., 50 cc.  $H_2O$  was added,  $C_6H_6$  distd., and the ppt. filtered off to yield 20.1 g.  $AcO-HgEt$ ; the filtrate was evapd. to dryness, extd. with  $MeOH$ , and the ext. evapd. to give addnl. 6.4 g. The new synthesis of alkylmercury acetates also made possible a convenient prepn. of other alkylmercury salts.

A. L. Lukaszcyk

S/081/62/000/022/023/088  
B144/B101

AUTHORS: Pasynkiewicz, Stanisław, Dahlig, Włodzimierz, Cieślak, Marek

TITLE: Synthesis of organoaluminum compounds. I. Reaction of organoaluminum compounds with alkyl chlorides

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 22, 1962, 224, abstract 22Zh226 (Roczn. chem., v. 35, no. 5, 1961, 1263-1292 [Pol.; summaries in Russ., Eng., and Germ.] )

TEXT: In continuation of a previous paper (RZhKhim, 1961, 14Zh244) it was shown that at 80-90°C RCl (in all cases R = C<sub>2</sub>H<sub>5</sub>) reacts with RAlCl<sub>2</sub> to form AlCl<sub>3</sub> and a mixture of C<sub>2</sub>H<sub>4</sub> and RH in approximately the same amounts. If AlCl<sub>3</sub> is present the relative content of C<sub>2</sub>H<sub>4</sub> in the gas mixture increases. Aluminum sesquichloride reacts with RCl analogously. RC<sub>6</sub>H<sub>5</sub> arises from the reaction in C<sub>6</sub>H<sub>6</sub>. Below 170°C the substances R<sub>2</sub>AlCl and R<sub>3</sub>Al do not react with RCl. In the presence of CoCl<sub>2</sub> (2-4%) R<sub>2</sub>AlCl  
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decomposes at  $160^{\circ}\text{C}$  and  $\text{R}_3\text{Al}$  decomposes at  $120^{\circ}\text{C}$ . The  $\text{CH}_3\text{Al}$  compounds react with  $\text{CH}_3\text{Cl}$  neither when heated nor in the presence of  $\text{CoCl}_2$ . The reaction mechanism with  $\text{RAlCl}_2$  participating as intermediate compound is discussed. [Abstracter's note: Complete translation.]

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S/081/62/000/022/024/068  
B144/B101

AUTHORS: Pasynkiewicz, Stanisław, Dahlig, Włodzimierz, Ciemniowski,  
Józef

TITLE: Synthesis of organoaluminum compounds. II. Reaction of  
metallic aluminum with alkyl chlorides in the gas phase

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 22, 1962, 224, abstract  
22Zh227 (Roczn. chem., v. 35; no. 5, 1961, 1293-1300  
[Pol.; summaries in Russ., Eng., and Germ.] )

TEXT: When  $\text{CH}_3\text{Cl}$  acts on finely dispersed Al in the absence of a catalyst  
( $390-400^\circ\text{C}$ , 3 hrs)  $\text{CH}_3\text{AlCl}_2$  arises with a yield of 75%.  $\text{C}_2\text{H}_5\text{Cl}$  does not  
react with Al (4 hrs,  $\leq 400^\circ\text{C}$ ). When heated with Al in the absence of a  
catalyst ( $300-320^\circ\text{C}$ , 30 min)  $n\text{-C}_3\text{H}_7\text{Cl}$  decomposes with formation of HCl,  
olefins, resin and  $\text{AlCl}_3$ .  $\text{C}_4\text{H}_9\text{Cl}$  reacts with Al in an analogous way  
( $190-200^\circ\text{C}$ , 2 hrs). An addition of  $\text{AlCl}_3$ ,  $\text{AlBr}_3$ ,  $\text{HgCl}_2$ ,  $\text{FeCl}_3$ ,  $\text{RAlBr}_2$  or

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$R_2AlBr$  to the reaction mixture accelerates considerably the  $RCl$  decomposition into olefins and  $HCl$  and reduces the reaction temperature to  $115-135^{\circ}C$ . In the case of the reaction of  $CH_3Cl$  with  $Al$  a mixture of  $CH_3AlCl_2$  and  $(CH_3)_2AlCl$  is produced. Probably  $C_2H_5Cl$  and  $AlCl_3$  form the complex  $C_2H_5^+AlCl_4^-$  which decomposes into  $C_2H_5^+$  and  $AlCl_4^-$ ; then  $C_2H_5^+$  changes to  $C_2H_4$  and  $H^+$ , which together with  $AlCl_4^-$  forms  $HCl$  and  $AlCl_3$ . The substances  $Al_2O_3$  and  $Fe_2O_3$  do not catalyze the reaction between  $Al$  and  $RCl$ .  $RCl$  is passed through a heated tube with  $Al$  filings  $O_2$  and moisture being excluded. [Abstracter's note: Complete translation.]

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S/081/62/000/022/025/088

B144/B101

AUTHORS: Pasynkiewicz, Stanisław, Dahlig, Włodzimierz, Meszorer, Ludwika

TITLE: Synthesis of organoaluminum compounds. III. Substitution of iodine or bromine by chlorine in organic aluminum compounds

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 22, 1962, 224, abstract 22Zh228 (Roczn. chem., v. 35, no. 5, 1961, 1301-1307 [Pol.; summaries in Russ., Eng., and Germ.] )

TEXT:  $R_nAlX_{3-n}$  (X = Br, I) become converted into  $R_nAlCl_{3-n}$  by heating with RCl in the  $N_2$  current.  $C_2H_5Cl$  is led into 14 g  $(C_2H_5)_2AlI$  (3 hrs, 100-120°C), the reaction products are condensed at -70°C, 8.8 g of  $C_2H_5I$  are obtained and the reaction mass is hydrolyzed. The amount of HCl proved that the halides were exchanged 100%. The reactions between  $R_nAlX_{3-n}$  and RCl were made analogously (R, n, X, reaction temperature in

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°C, reaction time in hrs, degree of halide exchange in %): C<sub>2</sub>H<sub>5</sub>, 2, I, 80-90, 3, 100; C<sub>2</sub>H<sub>5</sub>, 2, Br, 80-90, 3, 66.8; C<sub>2</sub>H<sub>5</sub>, 2, Br, 170-180, 1, 100; C<sub>3</sub>H<sub>7</sub>, 1.5, I, 80-90 (in ether), 2, 6.7; C<sub>3</sub>H<sub>7</sub>, 1.5, I, 120-130 (in ether), 3, 77.8; CH<sub>3</sub>, 1.5, I, 50-60, 1.5, 100; CH<sub>3</sub>, 1.5, I, 60-80, 3, 100.

[Abstracter's note: Complete translation.]

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PASYNKIEWICZ, Stanislaw; DAHLIG, Wlodzimierz; CIESLAK, Marek

Obtaining of aluminum organic compounds. I. Reactions of Aluminum organic compounds with alkylchlorides. Roczniki chemii 35 no.5:1283-1292 '61.

1. Katedra Technologii Organicznej I.. Politechnika, Warszawa.