LENGVENS, F., starshiy energetik

Operation of the Uglich locks. Rech. transp. 21 no.3:33 Mr '62. (MIRA 15:4)

1. Uglichskiy shlyuz. (Uglich--Locks (Hydraulic engineering))

SCHMINCKE,W., prof. dr. med. habil; LANGWINAT, A., dr. med. habil.; LORENZ, R., dipl. oec.

On a simple method for assessing morbidity in the People's Republic of Germany. Cesk. zdrav. 13 no.1:10-16 Ja '65

1. Lekarska akademie "Carl Gustav Carus", Ustav socialni hygieny, Drazdany.

LENGYEL, A.; BUJUM, O.; COCIUMAN, L.

Investigations concerning the action of antibiotics, in vitro & in vivo, on the sinus flora. Rumanian M. Rev. 1 no.2:89 Apr-June 57.

(SINUSITIS, ther.
antibiotics, eff. on sunus flora)
(ANTIBIOTICS, ther. use
sinusitis, eff. on sinus flora)

NASZ, I.; TOTH, M.; LENGYEL, A.

Adenoviruses isolated from excised tonsils. Acta microb. hung. 5 no.3: 267-269 1958.

1. Institute of Microbiology of the University Medical School. Budapest.
(ADENOVIRUS
typing of strains isolated from excised tonsils)

LENGYEL, A.

NASZ, Istvan (az orvostudomanyok kandidatusa); TOTH, Margit; LENGYEL, Anna

Adenoviruses isolated from tonsillar tissue. Magy. Tudom. Akad. Orv. Oszt. Kozl. 9 no.1:135-139 1958.

1. A Budapesti Orvostudomanyi Egyetem Mikrobiologiai Intezete.

(ADENOVIRUS
in tonsillar tissue, isolated strains (Hun))
(TONSILS, microbiol.
adenovirus, isolated strains (Hun))

LENGYEL, Anna, Dr.; BANKI, Gyorgy, Dr.; TAPFER, Dezso, Dr.

Present state of the oral therapy of enterobiasis; application of papain and combined papain-piperazine therapy with special regard to child communities. Orv. hetil. 99 no.24:797-802 15 June 58.

1. A Budapesti Orvostudomanyi Egyetem Kozegeszsegtani Intezetenek (Igazgato: Melly Jozsef dr. egyet. tanar) kozlemenye.

(OXYURIASIS, in inf. & child
ther., papain-piperazine citrate prep., oral admin. (Hun))
(PROTEASES, ther. use
papain-piperazine citrate prep. in oxyuriasis in inf. & child, oral admin. (Hun))
(PIPERAZINES, ther. use
piperazine citrate - papain prep. in oxyuriasis in inf. & child, oral admin. (Hun))

MOSONYI, Laszlo; CSIKY, Tivadar; RETSAGI, Gyorgy; LENGYEL, Anna; BAIAZSI, Imre; Szemere, Pal

Experimental studies concerning the virus susceptibility of the organism following antibiotic therapy. Magy. belorv. arch. 12 no.1: 3-8 Feb 59.

1. Budapesti Orvostudomanyi Egyetem II. sz. Belklinikajanak es Mikrobiologiai Intezetenek (igazgato: dr. Alfoldi Zoltan egyetemi tanar) kozlemenye.

(ANTIBIOTICS, inj. eff.
increased susceptibility to virus dis. (Hun))
(VIRUS DISEASES
increased susceptibility to virus dis. after antibiotic ther. (Hun))

NASZ, Istvan (Budapest, IX. Hogyes E.u.7/9, Hungary.);
LENGYEL, Anna (Budapest, IX. Hogyes E.u.7/9, Hungary.);
DAN, Pal (Budapest, IX.Hogyes E.U.7/9, Hungary.)

Adaptation of continuous cultures of human amniotic and Detroit-6 cells to heterologous sera. Acta biol Hung 12 no.2:141-146 '61.

1. Institute of Microbiology, Medical University, (Head: Z.Alfoldy) Budapest.

*

NASZ, I.; LENGYEL, Anna; DAN, P.; KULCSAR, Gizella

Informative studies on the hemagglutination spectra of adenoviruses. Acta microb. 9 no.1:69-76 '62.

1. Institute of Microbiology, University Medical School, Budapest (Director: Z.Alfoldy).
(HEMAGGLUTINATION) (ADENOVIRUS)

NASZ, Istvan; LENGYEL, Anna; DAN, Pal; KULCSAR, Gizella

Investigations relating to the hemagglutination properties of adenoviruses. Biol orv kozl MTA 13 no.1-2:191-200 '62.

1. Budapesti Orvostudomanyi Egyetem Mikrobiologiai Intezete.

LENGYEL, Anna; DAN, P.; NASZ, I.; KULCSAR, Gisella; CSERBA, Ida.

Influence of temperature and pH on the haemagglutinating activity and haemagglutination-inhibition test of adenoviruses. Acta microbiol. Hung. 10 no.3:253-259 '63.

1. Institute of Microbiology (Director: Z. Alföldy), University Medical School, Budapest.

*

HUNGARY

LENGYEL, A., DAN, P., NASZ, I., KULCSAR, G., CSERBA, I.: Medical University of Budapest, Microbiological Institute (Budapesti Orvostudomanyi Egyetem Mikrobiologiai Intezet).

"Investigation of Factors Influencing the Hemagglutinational Characteristics of Adenoviruses."

Budapest, Kiserletes Orvostudomany, Vol XV, No 3, June 1963, pp 319-325.

Abstract: [Authors' Hungarian summary] The influence of temperature and pH on the rat erythrocyte agglutination by type 9 adenovirus was examined. Of five temperatures tested (+4°C, R.T., 37°C air, 37°C and 40°C bath), 4°C and room temperature were optimal. The results were confirmed by experiments with types 10 and 13 of the virus. The effect of pH on the hemagglutination was tested at pH 6, 7, 7.5, 8, 8.5, 9 and 10. The optimum was found to be pH 9, 8.5 giving results close to the optimum. The sensitivity of the erythrocyte suspension to hemagglutinin was not impaired by standing, it even increased slightly between pH 7-9. If equal amounts of the virus are used, the hemagglutination-inhibiting reaction was not influenced by pH. 5 Hungarian, 7 Western references.

1/1

NASZ,I.; DAN, P.; LENGYEL,A.; CSERBA, I.

Laboratory infection with adenovirus type 8. Szemeszet 100 no. 2:99-104 Je '63.

1. BOTE Mikrobiologiai Intezet, igazgato: Alfoldy Zoltan egyet. tanar.
(ADENOVIRUS INFECTIONS) (KERATOCONJUNCTIVITIS)
(OCCUPATIONAL DISEASES)

LENGYEL, A.

2

HUNGARY

NASZ, I., KULCSAR, G., DAN, P., LENGYEL, A., CSERBA, I.; Medical University of Budapest, Microbiological Institute (Budapesti Orvostudomanyi Egyetem, Mikrobiologiai Intezet).

"The Etiology of the Kerato-Conjunctivitis Epidemica of 1961-62 in Budapest."

Budapest, Orvosi Hetilap, Vol 104, No 10, 10 Mar 1963, pages 442-445.

Abstract: [Authors' Hungarian summary modified] The authors attempted to clarify the etiology of the epidemic by isolation of the virus, hemagglutination and neutralization tests and complement-binding reactions. Nine strains of adeno viruses were isolated, seven of which belonged to type 8, two were found to be of type 6. It was demonstrated that hemagglutination inhibiting antibodies are produced in men after type 8 adeno virus infection which are as specific as the neutralizing antibodies. Since hemagglutination tests are easier to carry out than the virus neutralization tests, they are recommended for the study of kerato-conjunctivitis epidemica. 13 Western, 13 Eastern European references.

1/1

NASZ,I.; LENGYEL, Anna; DAN,P.; KULCSAR, Gisella

Heterotypic haemagglutination inhibition in the adenovirus group. Acta microbiol. acad. sci. Hung. 10 no.4:379-385 '63-'64

1. Institute of Microbiology (Director: Z.Alfoldy), University Medical School, Budapest.

LENGYEL,

VINCE, Augustin, dr.; LENGUEL, Anna, dr.; NASZ, Istvan, dr.

Late course of the type 8 adenovirus infection associated with roentgenological changes in the lung. Orv. hetil. 105 no.29: 1366-1368 19 Jl'64.

1. Budapesti Fovarosi Laszlo Korhaz, Rontgenosztaly es Budapesti Orvostudomanyi Egyetem. Mikrobiologiai Intezet.

LENGYEL, Anna; NASZ, I.

Adenovirus haemagglutination-inhibiting antibodies in human sera. Acta microbiol. acad. sci. Hung. 11 no.2:105-113 '64.

1. Institute of Microbiology (Director: Z. Alfoldy) University Medical School, Budapest.

L 31459-66
ACC NR: AP6023101 SOURCE CODE: HU/0031/66/000/002/0058/0062

AUTHOR: Lengyel, Attila--Lendel, A. 42 B

ORG: Research Institute for Telecommunication (Tavkozlesi Kutato Intezet)

TITLE: Design of a mechanism for driving wobblers

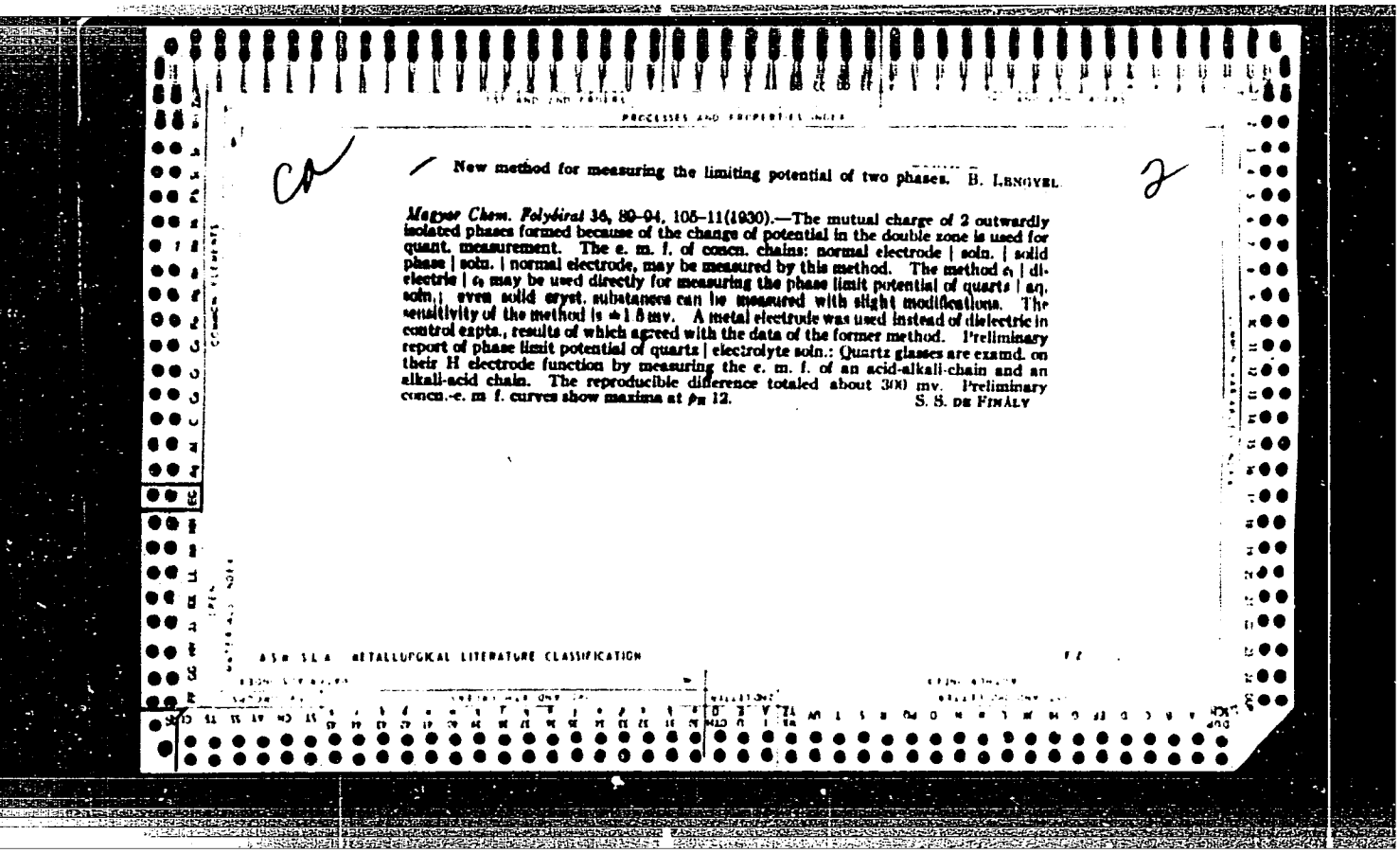
SOURCE: Finommechanika, no. 2, 1966, 58-62

TOPIC TAGS: microwave, frequency control, electronic component, microwave component

ABSTRACT: The design of a microwave wobbler, required to furnish alternating motion at a frequency of 300/min. at a stroke variable between 20 and 0.5 mm., without disturbing additional vibrations, was described. The calculation of the design parameters was described in detail, and the construction, performance, operation, and applications of the device was described and illustrated. Orig. art. has: 4 figures and 46 formulas. [JPRS]

SUB CODE: 09 / SUBM DATE: none / ORIG REF: 005

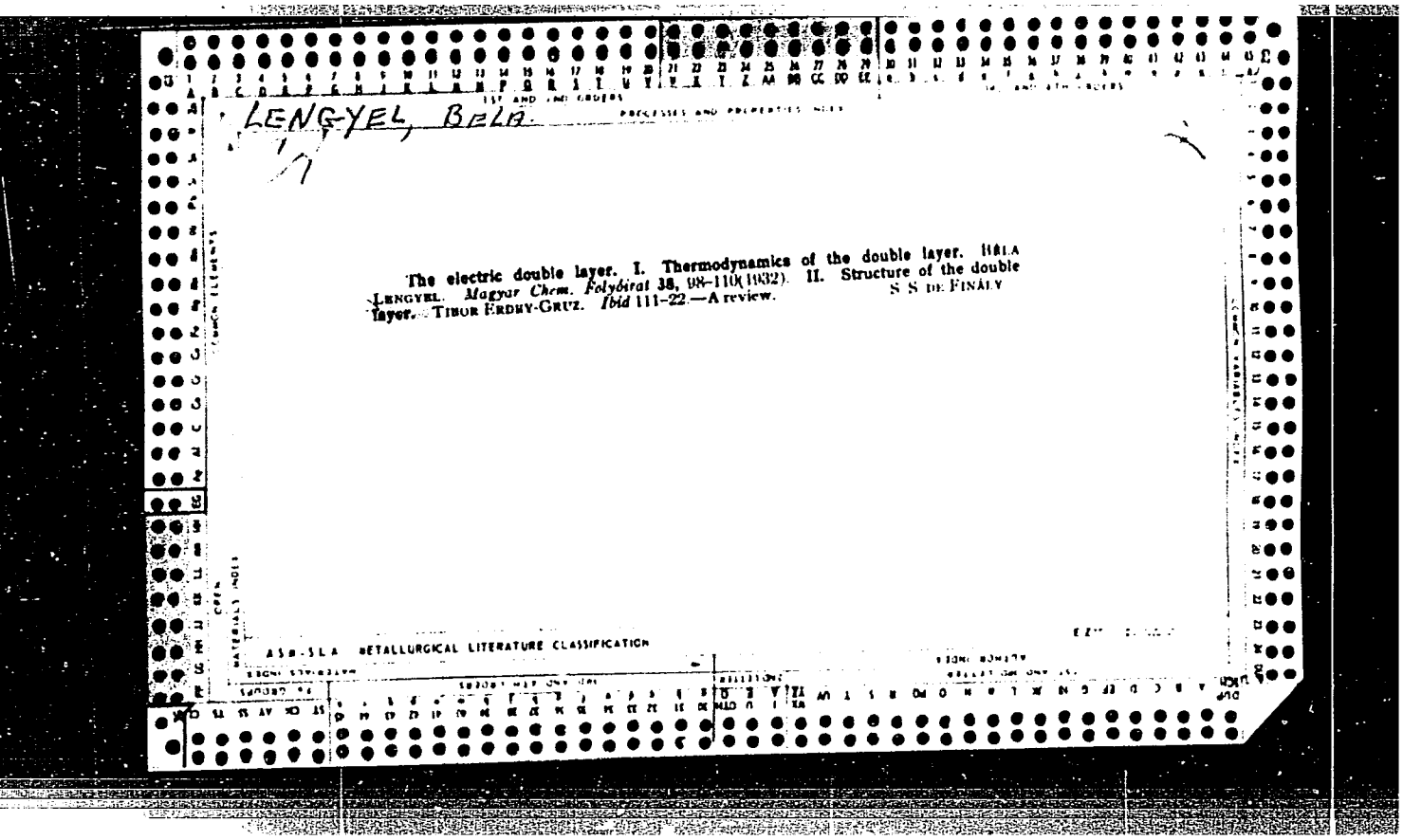
Card 1/1 mc 0915 2306



New method for measuring the limiting potential of two phases. B. LENGYEL.

Magyar Chem. Folyóirat 36, 89–94, 105–11(1930).—The mutual charge of 2 outwardly isolated phases formed because of the change of potential in the double zone is used for quant. measurement. The e. m. f. of concn. chains: normal electrode | soln. | solid phase | soln. | normal electrode, may be measured by this method. The method c_1 | dielectric | c_2 may be used directly for measuring the phase limit potential of quartz | aq. soln.; even solid cryst. substances can be measured with slight modifications. The sensitivity of the method is ±1.8 mv. A metal electrode was used instead of dielectric in control expts., results of which agreed with the data of the former method. Preliminary report of phase limit potential of quartz | electrolyte soln.: Quartz glasses are examd. on their H electrode function by measuring the e. m. f. of an acid-alkali-chain and an alkali-acid chain. The reproducible difference totaled about 300 mv. Preliminary concn.-e. m. f. curves show maxima at p_H 12.

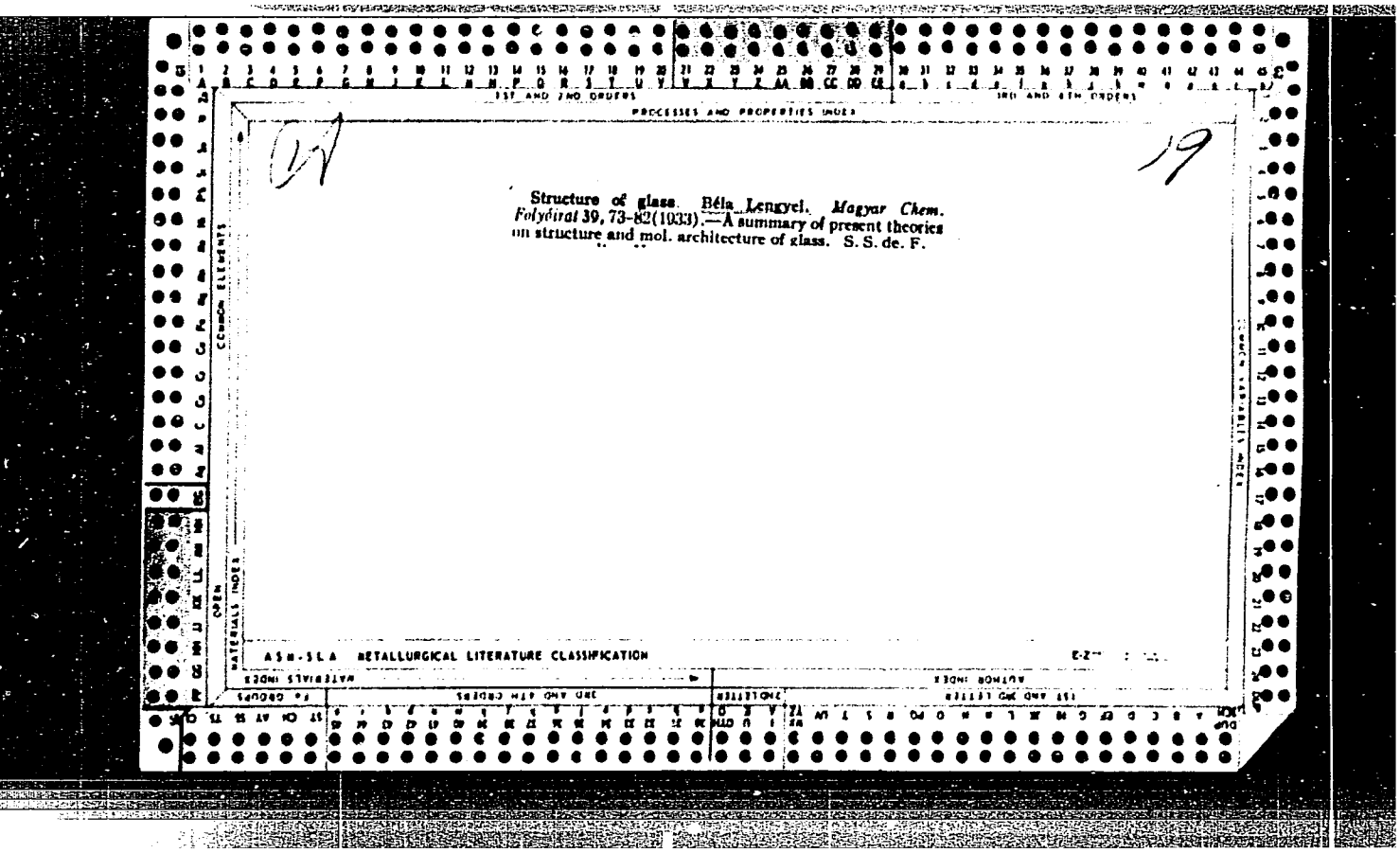
S. S. DE FINÁLY



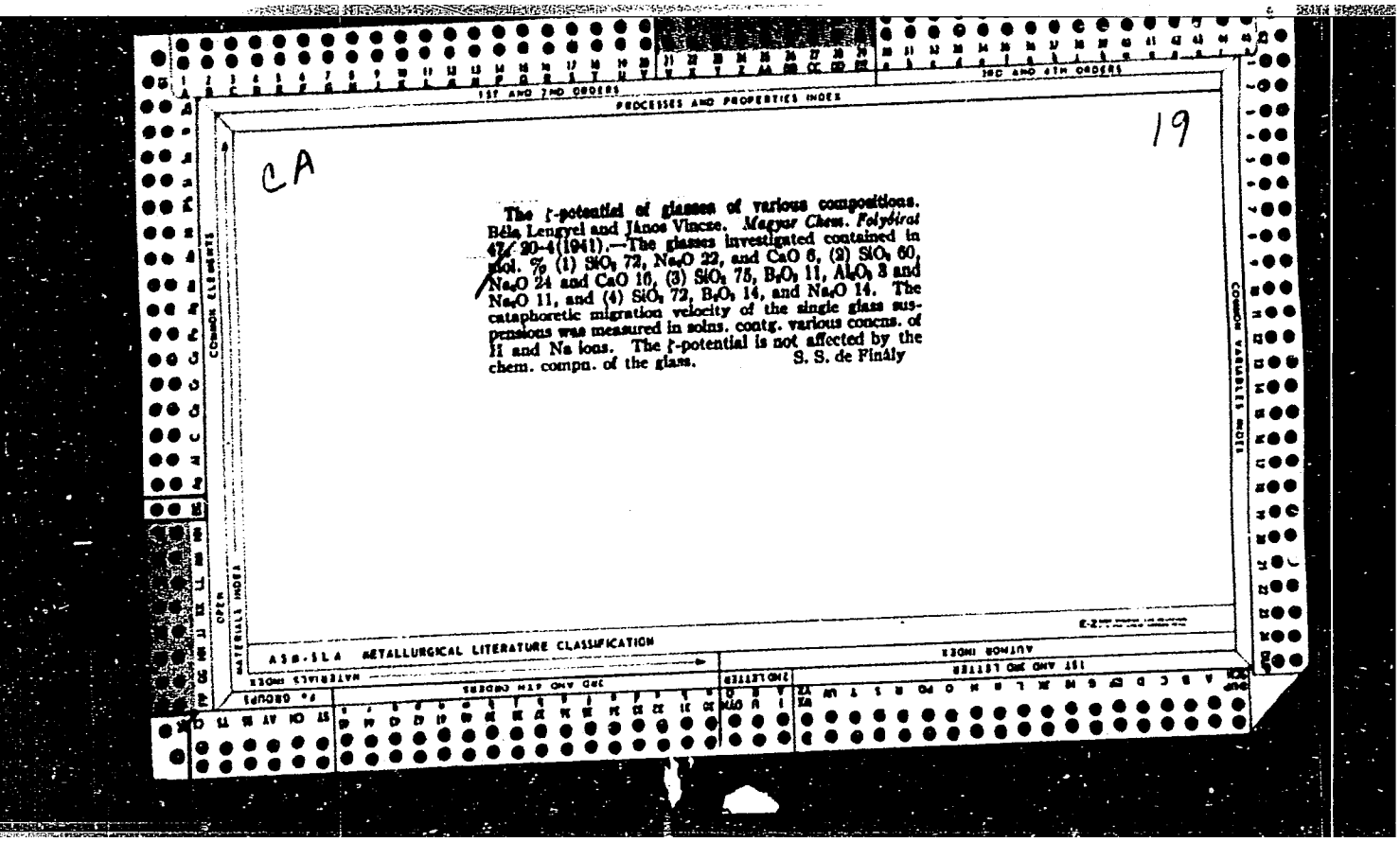
LENGYEL, BELA

The electric double layer. I. Thermodynamics of the double layer. BÉLA LENGYEL. *Magyar Chem. Folyóirat* **38**, 98–110(1932). II. Structure of the double layer. TIBOR ERDEY-GRÚZ. *Ibid* 111–22.—A review. S. S. DE FINÁLY

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



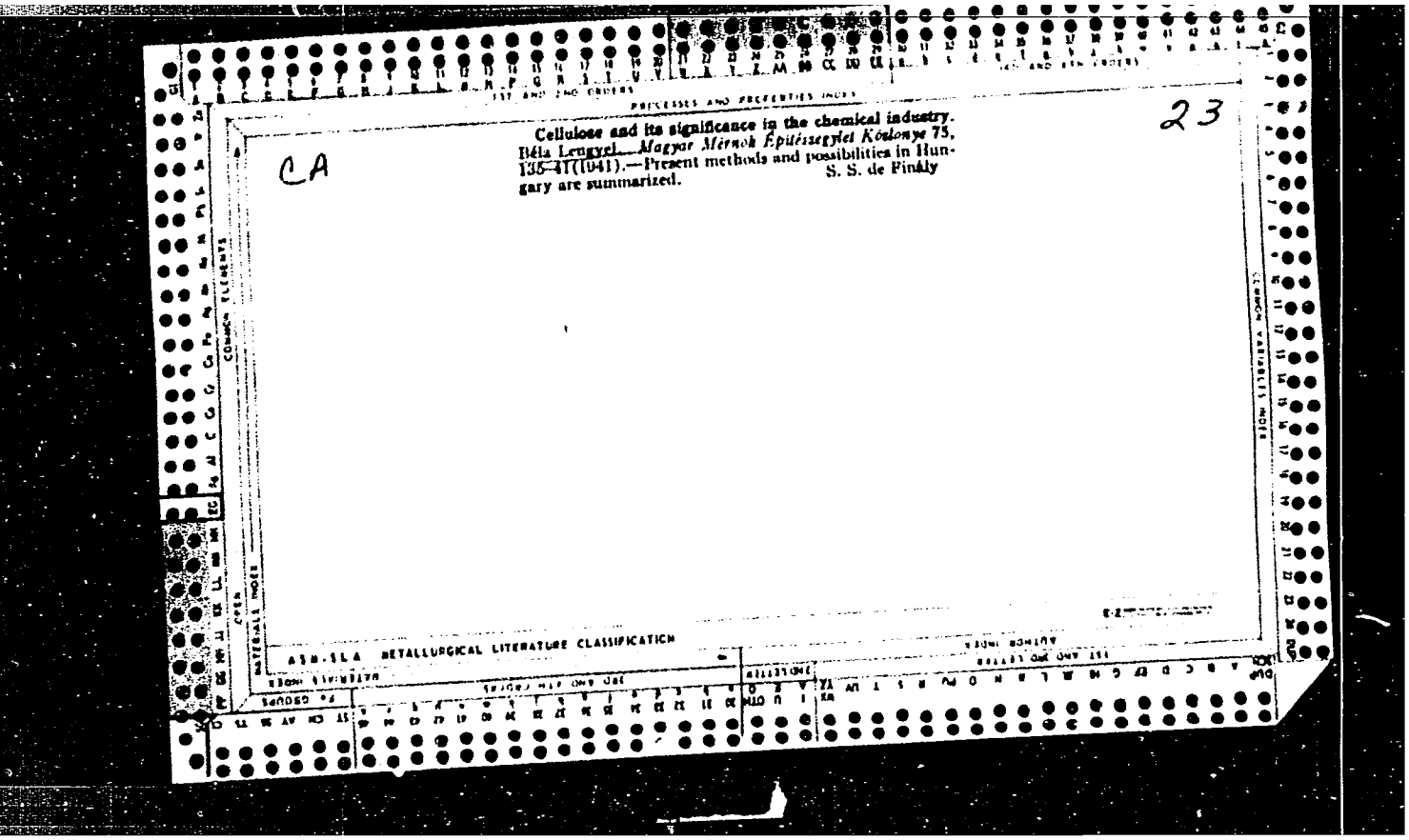
Structure of glass. Béla Lengyel. *Magyar Chem. Folyóirat* 39, 73-82(1933).—A summary of present theories on structure and mol. architecture of glass. S. S. de F.



CA

19

The ζ-potential of glasses of various compositions. Béla Lengyel and János Vincze. *Magyar Chem. Folyóirat* 47, 20–4 (1941).—The glasses investigated contained in mol. % (1) SiO_2 72, Na_2O 22, and CaO 6, (2) SiO_2 60, Na_2O 24 and CaO 16, (3) SiO_2 75, B_2O_3 11, Al_2O_3 3 and Na_2O 11, and (4) SiO_2 72, B_2O_3 14, and Na_2O 14. The cataphoretic migration velocity of the single glass suspensions was measured in solns. contg. various concns. of H and Na ions. The ζ-potential is not affected by the chem. compn. of the glass. S. S. de Finály



CA

23

Cellulose and its significance in the chemical industry. Béla Lengyel. *Magyar Mérnök Épitészegylet Közlönye* 75, 135–41(1941).—Present methods and possibilities in Hungary are summarized. S. S. de Finály

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

LENGYEL, B.

Hungarian Technical Abst.
Vol. 5 No. 2
1953

663:632.42.012.2

19. **On the quantity of lime required for the treatment of industrial waters** — *Ipari vizek előkészítésének mészszükségletéről* — B. Lengyel, A. Schmer and B. Csákvári. (Journal of the University for Chemical Industry — *Magyar Kémikusok Lapja* — Vol VII, No 4, April 1952, pp. 117–121, 1 fig., 2 tabs.)

The quantity of lime required for decarbonizing industrial (mainly boiler feed) waters is less than the quantity arrived at through computations with stoichiometric equations. Experiments proved that the difference was caused by the magnesium content of the natural waters. The quantity of lime required for decarbonization is determined by the following formula based on the results of investigations: lime = $to[K + Mg(o.3 + 0.02Mg) + c]$, where K = the quantity of carbonates, Mg = magnesium hardness, c = free carbonic acid, all in "German hardness degrees" (one degree = 10 mg CaO in one l of water). Experiments conducted with natural and artificially prepared waters have proven that the proposed formula gives more accurate and generally valid results than any used so far.

B. Lengyel

LENGYEL, B.

3

HUNG

12. **Preparation of tetraethoxy titanium.** — *A tetraetoxititán előállításáról* — B. Lengyel and T. Garai (Hungarian Journal of Chemistry. — *Magyar Kémiai Folyóirat* — Vol. 59, 1953, No. 11, pp. 343—345, 2 tabs.)

A simple method was elaborated for the preparation of tetraethoxy titanium. By reacting titanium tetrachloride with dry ammonia gas, titanium tetrachloride hexamine is produced. By treating the latter with ethanol tetraethoxy titanium is obtained. The product was filtered and then fractionated under reduced pressure yielding the pure ester. The compound was identified by chemical analysis and by determining the boiling point. Cryoscopic measurements were carried out to determine the association of the molecules.

AP 5 NO

LENGYEL, B.

Electric conductivity of glass. I. Conductivity of mixed glass. p. 37. (Koslemenyei, Budapest, Vol 4, no. 1/2, 1954)

SO: Monthly list of East European Accessions (EEAL), LC Vol 4, no. 6, June 1955 Uncl

LENGYEL BELA

1 mk.

Electric conductivity of glass. I. Conductivity of mixed glasses. Béla Lengyel and Zoltán Boksay (Eötvös Lorând Univ., Budapest). *Z. physik. Chem.* (Leipzig) 203, 93–112 (1954).—The elec. cond. of mixed glasses shows a min. that is explained by aid of a model for the elec.-cond. mechanism in glass based on the assumption that the model glass is a pure alkali ion conductor and that the migration of the ions is effected by transition from one lattice hole to another in the next layer. Based on that model the geometric hindrance was also calcd. for the transition of a greater ion into the lattice hole vacated by a smaller one. An equation for the cond. is deduced: $\kappa = A'(n_1F_1\kappa_1 + n_2F_2\kappa_2)$ in which κ = cond. of the mixed glass, κ_1 and κ_2 = cond. of the pure components 1 and 2, n_1 and n_2 the mol. fraction of 1 and 2 resp., A, F_1, and F_2 = factors that are characteristic of the degree of hindrance of the migrating ions, and r = a const. characteristic of the glass used, which does not depend on the temp. and which is probably a measure of the no. of lattice holes present in the glass before a current is passed through it. Similarly, equations were deduced for the transport nos. for the ion 1 and 2 resp.: $\nu_{1(2)} = n_{1(2)}F_{1(2)}/(n_1.F_1 + n_2.F_2)$ which are also independent of the temp. The values calcd. from the theoretically deduced equations agreed with the exptl. results. Friedrich Epstein

BL

(1)

Lengyel, Béla

GERM.

1 copy PM

Ion emission of glass. Béla Lengyel and Ferenc Till (Eötvös Loránd Univ., Budapest). Z. physik. Chem. (Leipzig) 203, 312-17(1954).—The ion emissivity of solid K-Na mixed glasses was detd. quantitatively at 470° as a function of the glass compn. A thin tube of the glass to be measured was surrounded by a cylindrical collecting cathode and heated electrically by Pt wires connected with the ends of the tubes, which were covered with a Pt layer. The anodic voltage was 200 v. The ion current varied from 2.5×10^{-8} amp./sq. cm. for pure K glass to 7.0×10^{-8} amp./sq. cm. for pure Na glass, having a marked min. of 0.16×10^{-8} amp./sq. cm. for a mol. ratio of K:Na = 1:1 in the glass. The current, which is independent of the anodic voltage, was measured with a valve galvanometer. The cond. slope of the glasses investigated, which was also measured, is similar to that of the emissivity. Also in *Magyar Tudományos Akad. Kém. Tudományok Osztályának Közleményei* 5, 329-33(1954). Friedrich Epstein

(1)

PM

LENGYEL, B.

2

Glass electrodes insensitive to alkalies. B. Lengyel et al. *Magyar Kémikusok Lapja* 9, 285–8(1954); *Hung. Tech. Abstr.* 7, No. 2, 5(1955).—Expts. were carried out to produce Li glass electrodes insensitive to alkalies. The errors of the electrode glasses produced at high pH values were detd. The errors of the electrode glasses due to the presence of different alk. ions in various concns. are given. It was found that Jordan's empiric equation is applicable for the computation of the alk. error of Li electrode glasses, and the consts. of this equation are given. A nomographic chart is furnished for the calibration of the electrode glasses in the presence of different alk. ions. K. L. C.

LENGYEL, BÉLA

Alkali-free suspension buffers. Béla Lengyel and Béla Csákvári (Eötvös Univ., Budapest). *Magyar Kém. Folyóirat* 61, 78–80(1955).—Buffer systems free of alkali, not sensitive against the action of CO_2 in air, and suited for the prepn. of systems of identical pH values but of different concns. of alkali ions can be obtained by dissolving 158 g. $Ba(OH)_2.8H_2O$ and 0.8 mole $BaCl_2.2H_2O$ in 1000 ml. distd. H_2O and shaking 1 hr. The system, with a pH of 13.34 at 20°, was stable for 1 year. In another method 10 g. alkali-free MgO and 1 mole $MgSO_4.7H_2O$ are dissolved in 1000 ml. distd. H_2O and shaken for 1 hr. The pH of the product, 9.18 at 25°, was stable. In the 3rd method 10 g. alkali-free ZnO and 1 mole $ZnSO_4.7H_2O$ are dissolved in 1000 ml. distd. H_2O and shaken 1 hr. The pH of the product was 5.55 at 25°, and was as stable as the previous soln. The prepns. should be shaken prior to use and allowed to stand 10 min., since the coarse suspended particles may cause deviations of some hundredth of a unit. I. F.

LENGYEL, B.: BOKSAY, Z.

Electric conductivity of glass. II. Conductivity of Li-Na, Na-K, K-Li mixed glass.
p. 129. Vol 6, no. 1/2, 1955. KOZLEMENYEI. Budapest, Hungary.

So: Eastern Electric Accession. Vol 5, no. 4, April 1956

LENGYEL, B.; GARZO, T.

Chloromethyisilanes and the tension of their mixture. p. 274.
MAGYAR KEMIAI FOLYOIRAT. Budapest. Vol. 61, no. 9, Sept. 1955.

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

LENGYEL BELA

Electric conductivity of glasses. II. Conductivity of lithium-sodium, sodium-potassium, and potassium-lithium mixed glasses. Béla Lengyel and Zoltán Boksay (Eötvös Lorand Univ., Budapest). *Z. physik. Chem.* (Leipzig) 204, 157-64(1955); cf. *C.A.* 48, 1112*d*.—The elec. cond. of Li-Na, Na-K, and K-Li mixed glasses was detd. experimentally as a function of the alkali ratio in the glasses and of the temp. The results conform well to the theory of the elec. cond. of mixed glasses given earlier (*loc. cit.*).

Friedrich Epstein

(1)

LENGYEL, Bela

Electrochemistry of glass. Béla Lengyel. *Silikattech.* 7 [10] 391–94 (1956).—Glasses that contain at least two alkalis show a pronounced maximum of electrical resistance as a function of the alkali ratio. This is explained by the migration of the alkali ions which, under the action of the outer electric field, enter into the open spaces in glass structure. A fairly complicated formula for electrical conductivity was developed, which was confirmed by tests made with silicate and other glasses. 4 figures, 13 references. M.H.

LENGYEL, B.; TOROK, F.

LENGYEL, B.; TOROK, F. Equilibration of linear methyl polysyloxanes. P. 131.

Vol. 8, No. 1, 1956
KOZLEMENYEI
SCIENCE
Budapest, Hungary

So: East European Accession, Vol. 6, No. 2, Feb. 1957

Lengyel, B.

SILIKAT TECHNIK

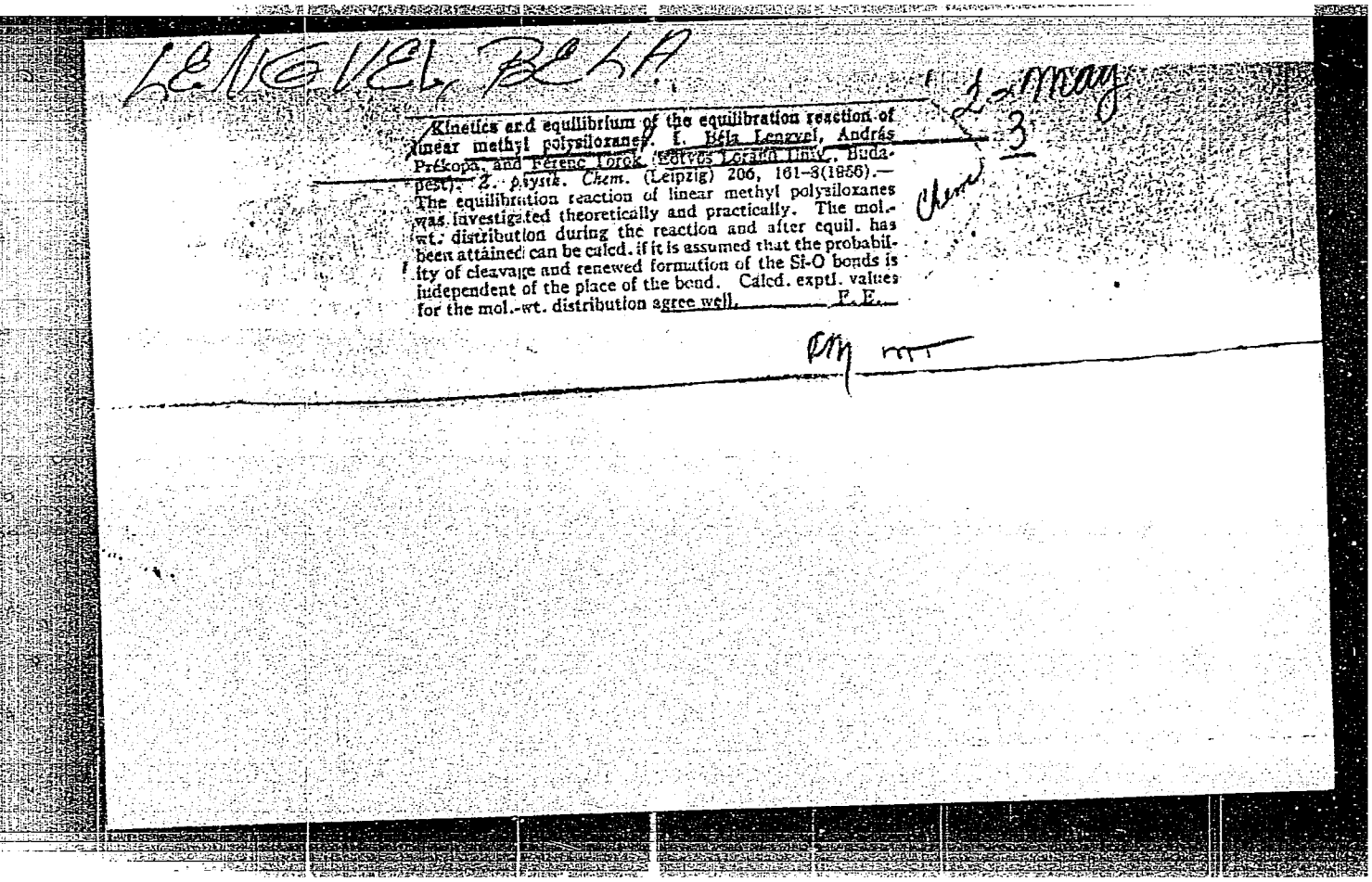
Issue Nr 10, October, 1956, pp 391-394

1 PM

LENGYEL, B.: Institute for gen. and anorg. Chem., Eötves-Lorand University, Budapest, Hungary

Contribution to the Electrochemistry of Glass

The electrochemical properties of glass have already been the object of many studies. The author treats electric conductivity and ion emission of mixed glasses, and also the electromotoric behaviour of glass surfaces in aequous solutions.



LENGYEL, BÉLA

2-mag
3
chem

Kinetics and equilibrium of the equilibration reaction of linear methyl polysiloxanes. I. Béla Lengyel, András Prékopa, and Ferenc Török (Eötvös Loránd Univ., Budapest). Z. physik. Chem. (Leipzig) 206, 161-8(1956).—The equilibration reaction of linear methyl polysiloxanes was investigated theoretically and practically. The mol.-wt. distribution during the reaction and after equil. has been attained can be calcd. if it is assumed that the probability of cleavage and renewed formation of the Si-O bonds is independent of the place of the bond. Calcd. exptl. values for the mol.-wt. distribution agree well. P. E.

Pavlenko, N. I.

value λ_0 of A; from the (normed) approximating eigen vectors f_n associated with λ_n, one can choose a subsequence converging strongly to an eigen vector of A. Furthermore, if any subsequence of the f_n converges to an eigenvector f of A, then the associated eigenvalue is λ_0. Similar results are valid for invariant subspaces associated with λ_0 and the λ_n, and for the operators $P_n - \lambda_n P_n A$. Applications are given to the study of the equation $x - A(\lambda)x = f$, where $A(\lambda)$ is a completely continuous operator depending analytically on the parameter λ. More generally the equation $Ax - B(\lambda)x = f$ is considered. *B. Gelbaum.*

2/2

LENGYEL, BELA

Methylation of silicon tetrachloride. Béla Lengyel and Tamás Székely (Eötvös Loránd Univ., Budapest). Z. anorg. u. allgem. Chem. 287, 273–81(1956).—The reaction of $SiCl_4$ and $Me_2Al_2Cl_4$ (I) (an equimol. mixt. of $MeAlCl_2$ and $Me_3Al_2Cl_3$) was investigated in an autoclave at 250° and approx. 30–40 atm. I was prepd. in approx. 100% yield by passing dry MeCl over chips of Al alloy contg. 5% Cu. The reaction of $SiCl_4$ and I was interrupted after various lengths of time and the compn. of the reaction mixt. with respect to Si detd. The Me/Si ratio varied from 1.62 to 1.69. Within 3 hrs. the Me groups of I are completely replaced by Cl and combined to the Si. The products appear in the order $SiMe_4$, Me_2SiCl_2, $MeSiCl_3$, and $MeSiCl_2$. The concn. of $SiMe_4$ goes through a max. and then drops to zero. After exhaustion of I, it acts as the alkylating agent. The concn. of Me_2SiCl_2 also shows a max. with respect to time. The system approached an equil. in 2–3 hrs. with Me_2SiCl_2 and $MeSiCl_3$ as the chief products. The course of the reaction is explained on the basis of a theoretical consideration of the mechanism. An azeotrope of Me_2SiCl_2 and $SiCl_4$ in ratio 86.3/64.8, b. 54.2°, was observed. G. P. M.

chem

2

3

F

HUNGARY/Laboratory Equipment. Instrumentation

Abs Jour: Ref Zhur-Khim., No 24, 1958, 81416.

Author : Boksay Z., Csakvari B., Lengyel B.
Inst :
Title : Of Negative Errors Attained with Glass Electrodes. I. Conditions Under Which Negative Errors Occur.

Orig Pub: Magyar tud. akad. ken. tud. oszt., 1957, No 2-3, 385-401.

Abstract: A formula for calculating potentials of glass electrodes has been proposed. This formula accounts for the film composition. It is assumed that in the electrode processes only the protons play an active role. In a film composed of gel, they are bound with water molecules and with groups of silica glass (the, so-called, proton acceptors). When the condition of the

Card : 1/2

Lengyel B

HUNGARY/Chemistry of High Molecular Substances. I

Abs Jour: Referat. Zhurnal Khimiya, No 21, 1958, 72845.

Author : B. Lengyel, A. Prekopa, P. Revesz, F. Torok.
Inst :
Title : Upon the Kinetics and the Equilibrium of the Equilibration Reaction of Linear Methylpolysiloxanes.

Orig Pub: Z. phys. Chem. (DDR), 1957, 208, No 1-2, 33-41.

Abstract: It is shown that the earlier derived equation (part 1, RZhKhim, 1957, 53965) for the distribution of linear methylpolysiloxanes according to the molecular weight in the process of attaining equilibrium can be generalized for the case of any bifunctional initial substances containing D units.

Card : 1/1

LENGYEL, Béla

Electric conductivity of glass. III. Conductivity of alkali borate mixed glasses. Béla Lengyel, Maria Somogi, Zoltán Boksay (Eötvös Loránd Univ., Budapest, Hung.). *Z. physik. Chem.* (Leipzig) 209, 15-21(1958); cf. *C.A.* 50, 1399g.—The theory developed in parts I and II on the cond. of alkali mixed glasses is extended to borate glasses; glasses contg. 20 mole % X_2O and 80 mole % B_2O_3 (X = alkali metal) being used. The expti. results are compared with the theory and discussed theoretically. Friedrich Epstein

LENGYEL, B.

Distr: 4E3d/4E2c(j)

Kinetics and equilibrium in the equilibration reaction of linear methyl polysiloxanes. B. Lengyel and F. Torok (Eötvös Loránd Univ., Budapest, Hung.). *Z. physik. Chem.* (Leipzig) 213, 289–97(1960).—The slope of the equilibration reaction of linear Me polysiloxanes was investigated, various acid and alk. catalysts being used. The activation consts. and the heats of activation were detd. In the presence of acids, the heat of activation is considerably diminished, compared with the noncatalyzed reaction. With alk. catalysts, the increase of the activation const. is responsible for the acceleration besides the alteration of the heat of activation. (*Magyar Tud. Akad. Kém. Tud. Osztályának Közleményei* 8, 131(1956); *CA* 52, 9731h).

Friedrich Epstein

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2 9 (NB)
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LENGYEL, Bela, a kemiai tudomanyok doktora (Budapest); TOROK Ferenc (Budapest)

Mechanism of the equilibration process of methylpolysiloxanes. Kem tud kozl MTA 13 no.3:285-293 '60. (EEAI 9:11)

1. Eotvos Lorand Tudomanyegyetem Altalanos es Szervetlen Kemiai Intezete, Budapest.
(Chemical equilibrium) (Methylsiloxanes)
(Polymers and polymerization)

LENGYEL, Bela, a kemiai tudomanyok doktora (Budapest); KSAKVARI, Bela, (Budapest); BOKSAY, Zoltan (Budapest)

The alkaline error of the glass electrode. I. Problem of the interpretation of the alkaline error. Kem tud kozl MTA 13 no.3: 301-315 '60. (EEAI 9:11)

1. Eotvos Lorand Tudomanyegyetem Altalanos es Szervetlen Kemiai Intezete, Budapest.
(Electrodes) (Glass)

LENGYEL, Bela, a kemiai tudomanyok doktora (Budapest); CSAKVARI, Bela (Budapest)

The alkaline error of the glass electrode. II. Effect of the glass composition on the alkaline error. Kem tud kozl MTA 14 no.1:55-61 '60. (EEAI 9:12)

1. Eotvos Lorand Tudomanyegyetem Altalanos es Szervetlen Kemiai Intezete, Budapest.
(Glass) (Electrodes)

LENGYEL, Bela, Prof., dr. (Budapest VIII, Muzeum korut 6-8); CSAKVARI, Bela (Budapest VIII, Muzeum korut 6-8); BOKSAY, Zoltan (Budapest VIII, Muzeum korut 6-8)

Data on the alkal error of theglass electrode. I. The problem of interpretation of the alkali error. Acta chimica Hung 25 no.2:225-242 '60. (EEAI 10:4)

1. Institute of General and Inorganic Chemistry, L.Eotvos University, Budapest.
(Sodium) (Errors, Theory of) (Electrodes)
(Ion exchange) (Cations) (Glass)

21718

H/005/61/000/002/001/002
B124/B203

158116 2209, 1372

AUTHORS: Lengyel, Béla, Székely, Tamás, and Czuppon, Alfréd

TITLE: Hydrolysis and polycondensation of mixtures of methyl-chloro silanes of high functionality

PERIODICAL: Magyar Kémiai Folyóirat, no. 2, 1961, 82-85

TEXT: The functionality of polycondensates of organic chlorosilanes is determined by the chloride content of the chlorosilanes used as initial substances. There are many publications on polymers built up from bifunctional groups, their formation and physicochemical properties, whereas there are no published data on systems with much higher average functionality than two, and a C/Si ratio smaller than two; the latter are practically used under the name of silicone resins and silicone varnishes. The authors studied methyl siloxane systems formed in the first reaction phase with high average functionality. They looked for a quantitatively measurable property of the hydrolyzate, which depended on the parameters characterizing the hydrolysis, and thus permitted the determination of a relation between the conditions of hydrolysis and the

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Hydrolysis and polycondensation ...

properties of the product. Experience has shown that the result of hydrolysis, or of primary polycondensation, is mainly determined (1) by the average functionality of the system, (2) by the functionality difference of monomers, (3) by the pH of the hydrolyzing medium, type and concentration of dissolved cations, and (4) by the method of hydrolysis. It is known that the effect of average functionality does not only appear in siloxanes but also in other high polymers. The functionality, however, differs very much for various systems of monomers. Table 1 gives the gel formation capacity of hydrolyzates with a C/Si ratio = 1.3 obtained from $(CH_3)_2SiCl_2$ (in the following D) and CH_3SiCl_3 (in the following T) on the one hand, and from $SiCl_4$ (in the following Q) and $(CH_3)_2SiCl_2$, on the other.

Gel formation capacity means the percent by weight of the part of the condensate unsoluble in the organic solvent, which had passed from the sol to the gel state. The polydispersity of the system increases with the functionality difference of monomers. From the point of view of co-condensation, it is convenient to conduct hydrolysis with a small amount of water dissolved in the organic solvent since both the rate of hydrolysis and that of polycondensation drop in this case. When conducting the

Hydrolysis and polycondensation ...

hydrolysis with pure, water-saturated butyl acetate at a dropping and mixing rate at which constant equilibrium is maintained, it was possible to obtain fully reproducible results. With rising pH and in the presence of magnesium ion, the polycondensation rate drops, and co-condensation is thus promoted. The diffusion constant was determined with an apparatus described in Ref. 2 (O. Lamm: Nova acta Reg. Soc. Sci. Upsala, 10, 6, 1937) and, since the $\partial c/\partial x$ - x curves yielded no ideal Gauss curve (Fig. 1), the constant was calculated by the moment method described in Ref. 3 (N. Gralén: Kolloid Z., 95, 188, 1941) from the relation

$$M_2/(M_o.2\beta^2 t) = 1/(c_1-c_2)\int_{c_2}^{c_1} Ddc = \overline{D}$$, where M_o is the zeroth moment, i.e., the planimetrically determined area below the curve, t is the time in sec, c is the concentration (g/100 ml of solution), and β is a constant, in this case equal to 10^2. The diffusion constant is a function of concentration. It rises noticeably (Table 2) in hydrolysis in a basic or buffered medium. Magnesium ions have a similar effect on hydrolysis as a rise in pH. In the concentration range of 5-8%, $\overline{D}$ is practically independent of the

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initial concentration c_0, and the numerical difference of diffusion constants drops. For the further evaluation of experimental data, the Boltzmann method was used, the applicability of which was proven (Fig. 2). Some typical data are given in Table 3 and Fig. 3; they show that a rise in pH in the hydrolyzing medium always effects an increase in the diffusion constant referred to the same concentration, except for the concentration range with small D_c. Hence, it follows that the diffusion constant of the primary hydrolyzate rises with the pH and in the presence of certain cations such as Mg^{2+}. It is known, however, that the increase in the diffusion constant in solutions of equal concentration corresponds to a decrease in the mean molecular weight. The established shape of the diffusion curves with a minimum indicates that besides the osmosis factor also the hydrodynamic factor is of importance (Ref. 5: J. Rosenberg, and C. O. Beckmann: J. Ann. N. Y. Acad. Sci., 46, 209, 1945), which is due to the fact that the siloxane skeleton also contains silanol groups, the presence of which was also proven by several other authors. The decrease in the mean molecular weight of methyl-siloxane sols with rising

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Hydrolysis and polycondensation ...

pH in hydrolysis, as well as the drop in gel formation capacity in Q-D systems under otherwise equal conditions indicates a decrease in polydispersity corresponding to the increase in co-condensation. This paper was read at the IUPAC Symposium in Wiesbaden in 1959. There are 3 figures, 3 tables, and 5 non-Soviet-bloc references. The two references to English-language publications read as follows: J. P. Price, S. G. Martin, and J. P. Bianchi: J. Polym. Sci., 22, 41, 1956; J. Rosenberg, and C.O. Beckmann: J. Ann. N. Y. Acad. Sci., 46, 209, 1945.

ASSOCIATION: Budapest, Eötvös Loránd Tudomanyegyetem Altalános és Szervetlen-Kémiai Intézete (Budapest, Loránd Eötvös University, Institute of General and Inorganic Chemistry), M. Tud. Akad. Müszaki Fizikai Kutato Intezete Mikromorfologiai Osztálya (Hungarian Academy of Sciences, Institute of Technical Physics, Department of Micromorphology)

SUBMITTED: May 10, 1960

Card 5/8 5

LENGYEL, Bela, kemiai tudomanyok doktora (Budapest); BOKSAY, Zoltan, a kemiai tudomanyok kandidatusa (Budapest); GALLYAS, Ferenc (Budapest)

Electric conductivity of glass. IV. The effect of bivalent cation mixture on conductivity. Kem tud kozl MTA 15 no.1:35-44 '61.
(EEAI 10:6)

1. Eotvos Lorand Tudomanyegyetem Altalanos es Szervetlen Kemiai Tanszeke, Budapest.
(Electric conductivity) (Glass) (Cations)

LENGYEL, Bela

"Surface properties of silicat glasses" by Gyorgy Koranyi.
Reviewed by Bela Lengyel. Magy kem folyoir 67 no.6:278 Je '61.

26897

H/005/61/000/010/001/002
D239/D302

15.8170

AUTHORS: Gebhardt, István, Lengyel, Béla and Török, Ferenc

TITLE: Catalyzed polymerization of octamethylcyclotetrasiloxane

PERIODICAL: Magyar kémiai folyóirat, no. 10, 1961, 450 - 454

TEXT: The article deals with investigation of the polymerization process using a thermolyzing catalyst. The authors experimented with the polymerization of octamethylcyclotetrasiloxane with a tetramethylammonium silanolate catalyst carried out in N_2 stream free from CO_2 and H_2O at 80 - 120°C, to obtain dimethyl polysiloxane. Experiments with octamethylcyclotetrasiloxane treated with HCl and N_2 and with unprepared octamethylcyclotetrasiloxane proved that the polymerization rate and the average molecular weight of the product are dependent primarily on the purity of the reacting substance. Results of experiments with four different samples, given in Table 1, show

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Catalyzed polymerization of...

that purified samples give a higher molecular weight in a shorter time than the unprepared samples. Another series of experiments with samples obtained from the distillation of purified octamethylcyclotetrasiloxane, revealed that the molecular weight of samples from the first and last fractions was lower than that of the main fractions. Data of this experiment are shown in Table 3, where the samples from the first fraction are marked 1 to 7, from the last fraction 35 and 36, and from the main fractions 7 - 34. The molecular weight of the polymerized product depends on the N to Si proportion of the mixture. The relation between the molecular weight and the N to Si is shown in Fig. 1; the dashed line represents the N to Si values computed by a method previously used in polymerization of octamethylcyclotetrasiloxane with potassium silanolate and described by F. Török and P. Gömöry (Ref. 6: Magy. Kém. Folyóirat, 66, 70, 1960). The authors suppose that the difference between the experimental and computed values is caused by functional

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D239/D302

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impurities. The molecular weight is also affected by decamethyltetrasiloxane. This property of decamethyltetrasiloxane makes it possible to obtain the required molecular weight which is of considerable significance in silicone rubber production. The influence of tetramethylammonium silanolate on the thermal stability of the products was examined by thermogravimetric analysis; data are shown in Fig. 3, in which the curves marked 18/3 and 20/3 represent samples polymerized with potassium silanolate, while the curve marked 95 represents a sample polymerized with tetramethylammonium silanolate. The authors express their appreciation to the management of the Nitrokémia Ipartelepek (Nitrokemia Chemical Works) which provided the raw material for the experiments and to Károly Almás, shop manager for his help with the experiments. There are 5 tables, 3 figures and 8 references: 2 Soviet-bloc and 6 non-Soviet-bloc. The references to the English-language publications read as follows: US Patent 2,490.357; US Patent 2,443.353; US Pa-

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D239/D302

Catalyzed polymerization of...

tent 2,634.284; US Patent 2,789.109.

ASSOCIATION: Budapest, Eötvös Loránd Tudományegyetem Általános- és Szervetlen-Kémiai Tanszeke (General and Inorganic Chemistry Department of the "Eötvös Lorand" University of Sciences, Budapest); Füzfögyártelep, Nitrokemiai Ipartelepek Kutató Laboratoriuma (Research Laboratory of the "Nitrokemia" Chemical Works, Füzfögyártelep)

SUBMITTED: April 5, 1961

Card 4/ 4

38623

S/081/62/000/009/011/075
B158/B101

15.2640

AUTHORS: Lengyel, B., Boksay, Z.

TITLE: The electrical conductivity of glasses. IV. Glasses with two different cations

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 9, 1962, 47, abstract 9B297 (Z. phys. Chem. (DDR), v. 217, nos. 5-6, 1961, 357-367)

TEXT: The electrical conductivity of glasses containing 16 mole% Na_2O, 68 mole% SiO_2 and varying quantities of MgO, CaO, and BaO was investigated. In all cases, the logarithm of resistivity was linearly dependent on the temperature reciprocal: $\log\rho = \alpha/T - \beta$. The logarithm of electrical conductivity at a fixed temperature increases non-linearly in measure with the substitution of Mg on Ca, Ca on Ba, and Ba on Mg. It reaches a maximum with a salient point at the Ba point, then falls again. The α and β parameters also behave so. An empirical formula is suggested for

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LENGYEL, Bela; SZEKELY, Tamas; CZUPPON, Alfred

Hydrolysis and polycondensation of methylchlorsilane mixtures with high functionality. Magy kem folyoir 67 no.2:82-85 F '62.

1. Budapesti Eotvos Lorand Tudomanyegyetem Altalanos es Szervetlen Kemiai Intezete es Magyar Tudomanyos Akademia Muszaki Fizikai Kutato Intezete Mikromorfologiai Osztalya.

GEBHARDT,Istvan; LENGYEL,Bela; TOROK,Ferenc

Synthesis of poly(dimethyl-siloxane)-diol. Magy kem folyoir 68 no.4:159-161 Ap '62

1. Eotvos Lorand Tudomanyegyetem Altalanos es Szervetlen Kemiai Intezete, Budapest,es Nitrokemia Ipartelepek V.,Balatonfuzfo.

ERDEY-GRUZ, Tibor, akademikus; BRUCKNER, Gyozo, akademikus; LENGYEL, Bela; TELEGDY-KOVATS, Laszlo, a tudomanyok doktora; HARDY, Gyula, kandidatus; GERECS, Arpad, akademikus; FOLDI, Zoltan; WOLKOBER, Zoltan; TUDOS, Ferenc, kandidatus; PURMAN, Jeno; KRAUSZ, Imre, kandidatus; ERDEY, Laszlo, akademikus; SCHAY, Geza, akademikus

An account of the 1961 work of the Section of Chemical Sciences, Hungarian Academy of Sciences. Kem tud kozl 18 no.3:343-394 '62.

1. Magyar Tudomanyos Akademia Kemiai Tudomanyok Osztalyanak titkara, es "A Magyar Tudomanyos Akademia Kemiai Tudomanyok Osztalyanak Kozlemenyei" szerkesztoje (for Erdey-Gruz). 2. Akademiai levelezo tag (for Lengyel and Foldi). 3. "A Magyar Tudomanyos Akademia Kemiai Tudomanyok Osztalyanak Kozlemenyei" szerkeszto bizottsagi tagja (for Bruckner, Erdey, Foldi, Gerecs, Hardy, Lengyel, Schay, Tudos).

LENGYEL, Bela

On the electricity transport in inorganic glasses. Kem tud kozl MTA 19 no.4:445-458 '63.

1. Eotvos Lorand Tudomanyegyetem Altalanos es Szervetlen Kemiai Tanszeke, Budapest, Szervetlen Kemiai Akademiai Kutato Csoport, Budapest; "A Magyar Tudomanyos Akademia Kemiai Tudomanyok Osztalyanak Kozlemenyei" szerkeszto bizottsagi tagja es Magyar Tudomanyos Akademia levelezo tagja.

LENGYEL, Bela, prof., dr. (Budapest, VIII., Muzeum korut 6-8);
GARZO, Gabriella (Mrs) (Budapest, VIII., Muzeum korut 6-8);
SZEKELY, Tamas (Budapest, VIII., Muzeum korut 6-8)

On some problems concerning the gas chromatographic analysis of methylchlorosilanes. Acta chimica Hung 37 no.1:37-51 '63.

1. Institute of General and Inorganic Chemistry, Lorand Eotvos University, Budapest. 2. Editorial board member, "Acta Chimica Academiae Scientiarum Hungaricae" (for Lengyel).

LENGYEL, Bela, prof., dr. (Budapest, VIII., Muzeum korut 6-8)
CSAKVARI, Bela (Budapest, VIII., Muzeum korut 6-8)

On the direct synthesis of methyl chloro silanes. Pt.1.
Acta chimica Hung 39 no.1:27-32 '63.

1. Institute of General and Inorganic Chemistry, L. Eotvos University, Budapest, and Research Group for Inorganic Chemistry of the Academy of Sciences, Budapest.

2. Editorial board member, "Acta Chimica Academiae Scientiarum Hungaricae" (for Lengyel).

LENGYEL, Bela, dr., egyetemi tanar; BRUCKNER, Gyozo, akademikus, egyetemi tanar.

Whither is science going? Term tud kozl 5 no.7:316-318 Jl '61.

1. Eotvos Lorand Tudomanyegyetem Altalanos es Szervetlen Kemiai Tanszekenek vezetoje (for Lengyel). 2. Eotvos Lorand Tudomanyegyetem Szerves Kemiai Intezetenek igazgatoja (for Bruckner).

ACC NR: AP6032675 SOURCE CODE: HU/0005/66/000/002/0085/0092

AUTHOR: Devay, Jozsef; Lengyel, Bela (Junior)

ORG: Department for Physical Chemistry, University for the Chemical Industry, Veszprem (Vegyipari Egyetem Fizikai-Kemiai Tanszeke)

TITLE: Effect of alternating current on the corrosion of zinc in methyl alcoholic medium

SOURCE: Magyar kemiai folyoirat, no. 2, 1966, 85-92

TOPIC TAGS: corrosion, zinc, alternating current

ABSTRACT: It was shown that the zinc anode in a water-free methyl-alcoholic potassium chloride electrolyte, with a platinum-zinc cathode, corrodes in relation to the frequency and intensity of superimposed alternating current. The direct current characterizing the corrosion shows a minimum at about the middle of the frequency range, indicating also that this minimum increases with increasing alternating current density. The phenomena were described in detail and were interpreted in terms of a mechanism involving the periodic oxidation and reduction of the methyl alcohol solvent. Orig. art. has: 20 figures, 7 formulas and 1 table. [JPRS: 34,805]

SUB CODE: 07 / SUBM DATE: 18Jun65 / ORIG REF: 017 / OTH REF: 018

Card 1/1

ACC NR: AT6033611 SOURCE CODE: HU/2502/65/043/002/0177/0185

AUTHOR: Lengyel, Bela--Lendel, B. (Doctor; Professor; Budapest); Csakvari, Bela--Chakvari, B. (Doctor; Professor; Budapest); Toperczer, Johanna--Topertser, Y. (Doctor; Budapest)

ORG: [Lengyel; Csakvari] Department of General and Inorganic Chemistry, Eotvos Lorand University, Budapest (Eotvos Lorand Tudomanyegyetem, Altalanos es Szervetlen Kemiai Tanszek); [Toperczer] Oncological Institute, Budapest (Onkologiai Intezet)

TITLE: Alkaline error of the glass electrodes. III. New data on the interpretation of the alkaline error

SOURCE: Academia scientiarum hungaricae. Acta chimica, v. 43, no. 2, 1965, 177-185

TOPIC TAGS: electrochemical analysis, glass electrode

ABSTRACT: The mole fraction of sodium ions present in the surface layer of the MacInnes-Dole glass was determined by the radiochemical tracer method (using ^{24}Na) and the results were compared with mole fractions calculated from measured values of electromotive force. The rather good agreement between the mole fractions can be considered as an experimental proof of the theory proposed by the authors for the quantitative interpretation of the alkaline error. Orig. art. has: 2 figures, 20 formulas and 1 table. [Based on authors' Eng. abst.] [JPRS: 33,540]

SUB CODE: 07, 09 / SUBM DATE: 24Nov64 / ORIG REF: 002 / OTH REF: 006

Card 1/1

L 44608-66 EWP(j) RM

ACC NR: AT6033138 SOURCE CODE: HU/2502/65/044/004/0373/0383

AUTHOR: Lengyel, Bela--Lendel, B. (Doctor; Professor; Budapest); Halmos, Terez--Khalmosh, T. (Budapest); Szekely, Tamas--Sekey, T. (Doctor; Budapest)

ORG: Department of General and Inorganic Chemistry, Eotvos Lorand University, Budapest (Eotvos Lorand Tudomanyegyetem, Altalanos es Szervetlen Kemiai Tanszek), Research Group for Inorganic Chemistry, MTA, Budapest (MTA Szervetlen Kemiai Kutatocsoport)

TITLE: Recent investigations of the hydrolysis and polycondensation of mixtures of methyl trichlorosilane and dimethyl dichlorosilane

SOURCE: Academia scientiarum hungaricae. Acta chimica, v. 44, no. 4, 1965, 373-383

TOPIC TAGS: hydrolysis, polycondensation, silane

ABSTRACT: Mixtures of methyl trichlorosilane and dimethyl dichlorosilane were subjected to hydrolysis under carefully adjusted experimental conditions. The correlation between the distribution of molecular weight in the primary hydrolysis product and the composition of the system to be hydrolyzed was established. Furthermore, the effect of the pH value, and of various cations and anions were also considered and conclusions were drawn as to the assumed mechanism of the hydrolysis-polycondensation process. Orig. art. has: 10 figures, 6 formulas and 1 table. [Based on authors' Eng. abst.] [JPRS: 33,540]

SUB CODE: 07 / SUBM DATE: 15Dec64 / ORIG REF: 001 / OTH REF: 010

Card 1/1 blg

0930 0692

L 45637-66 EWP(t)/ETI IJP(c) JD/WB

ACC NR: AT6033878 SOURCE CODE: HU/2502/65/046/004/0325/0344

AUTHOR: Devay, Jozsef--Devai, Y. (Professor; Doctor; Veszprem); Lengyel, Bela-- Lend'yel, B. (Junior; Veszprem)

ORG: Department for Physical Chemistry, University for the Chemical Industry, Veszprem

TITLE: Effect of alternating current on the corrosion of zinc in a methanolic medium

SOURCE: Academia scientiarum hungaricae. Acta chimica, v. 46, no. 4, 1965, 325-344

TOPIC TAGS: corrosion, zinc, alternating current, electrolyte

ABSTRACT: The corrosion of the zinc electrode in a zinc-platinum galvanic element with anhydrous methanol electrolyte increased upon the superimposition of alternating current onto the direct current generated by the galvanic element. The extent of the increased corrosion was dependent on the voltage and the amperage of the alternating current, and also on its frequency. The frequency vs. corrosion increase effect shows a maximum at a relatively low frequency level. The electrolyte, being periodically reduced and oxidized, contributes to polarization phenomena. Orig. art. has: 20 figures, 7 formulas and 1 table. [Orig. art. in German] [JPRS: 34,165]

SUB CODE: 07 / SUBM DATE: 20Jun65 / ORIG REF: 018 / OTH REF: 017

Card 1/1

LENGYEL, Bertalan; PAPAI, Denes; FERNBACH, Jozsef

Use of the gonorrhea cultivation method in the Szolnok County Clinic. Borgyogy. vener. szemle 13 no.2:91-94 Apr 59.

1. A Szolnok Megyei Bor-Nemibeteggondozo Intezet (Vezeto foorvos: Lengyel Bertalan dr.) es a Szolnok Megyei Kozegeszsegugyi es Jarvanyugyi Allomas (Igazgato foorvos: Harczos Gyorgy dr.) kozlemenye.
(GONORRHEA, diag.
culturing of Neisseria gonorrhoeae in county dermatol. & venerol. clinic in Hungary (Hun))

LENGYEL, Bertalan, dr.; RACZ, Istvan, dr.

On calcinosis of the skin with a case of local calcinosis. Borgyogy. vener. szemle 38 no.4:177-182 Ag '62.

1. A Szolnok megyei Guszman Jozsef Bor- es Nemibeteggondozo Intezet (vezeto foorvos: Lengyel Bertalan dr.) es a Fovarosi Bor- es Nemibeteggondozo Intezet (igazgato foorvos: Somogyi Zsigmond dr.) kozlemenye.

(SKIN dis) (CALCIFICATION case reports)

SZEGO, Laszlo, dr.; SZABO, Peter, dr.; CSERVENKA, Istvan, dr.; LENGYEL, Bertalan, dr.

Dermatitis of the genital area as an occupational disease of agricultural laborers stacking hay. Borgyogy. vener. szemle 38 no.5:206-214 O '62.

1. A Szabolcs-Szatmar-megyei Tanacs Korhaza Nyiregyhaza (igazgato: Lengyel Ferenc dr.) Borgyogyaszati Osztalyanak (foorvos: Szego Laszlo dr.) a Debreceni Borgyogyaszati Klinika (igazgato: Szodoray Lajos dr. egyetemi tanar) es a Jaszkun-Szolnok megyei Tanacs Bor- es Nemibeteggondozo Intezete (vezeto foorvos: Lengyel Bertalan dr.) kozlemenye.

(GENITALIA, MALE) (ANTIHISTAMINES)
(CALCIUM) (AGRICULTURAL WORKERS DISEASES) (OCCUPATIONAL DERMATITIS)

LENGYEL, E.; RUSU, I.; VAIDA, A.

Morphofunctional aspect of the lymphatic intramural system of the large intestine; lymphatic periglandular spaces. p. 961

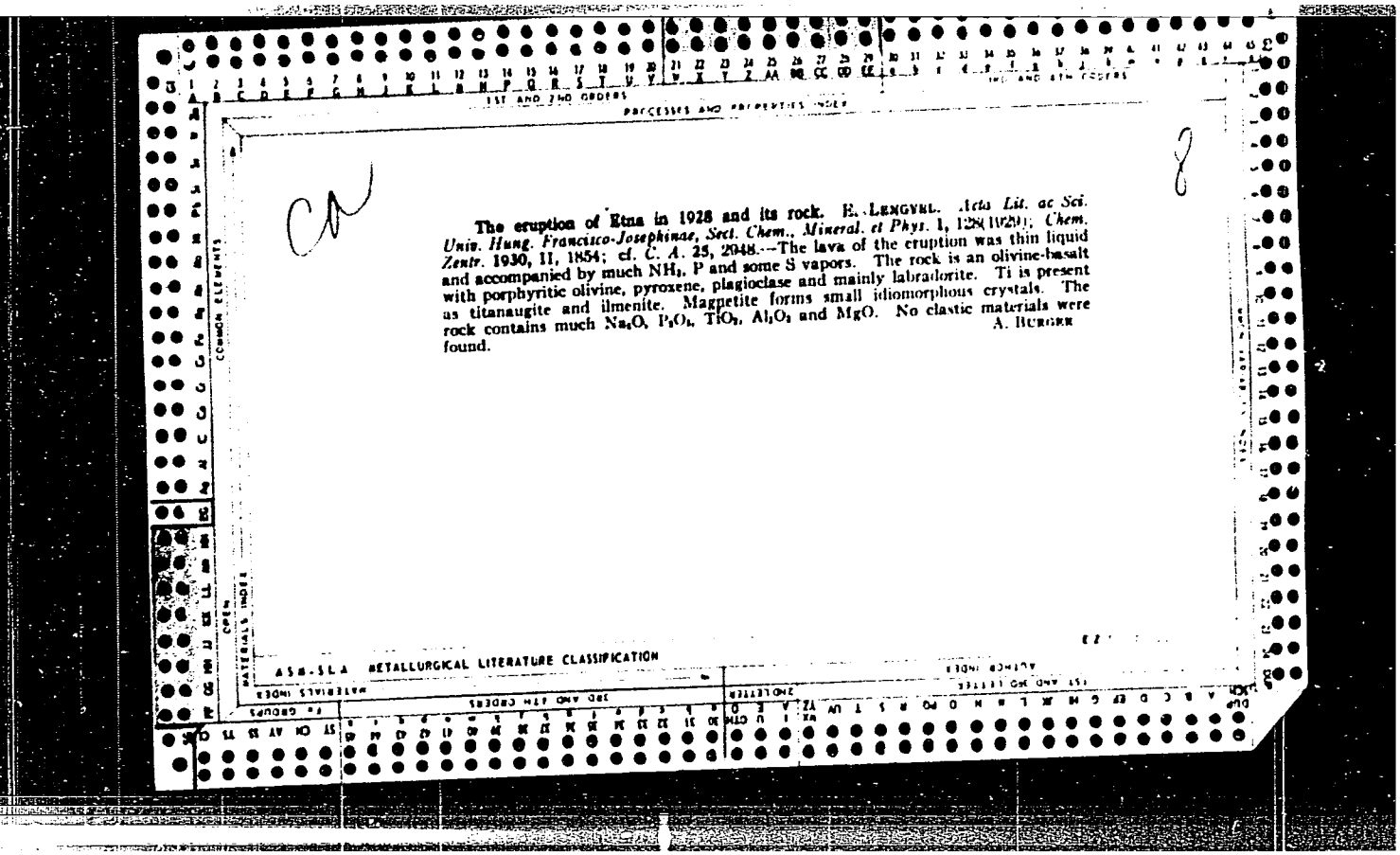
COMUNICARILE. Bucuresti, Rumania. Vol. 8, no. 9, Sept. 1958

Monthly list of European Accessions(EEAI) LC, Vol. 8, no. 8, Aug. 1959

Uncl.

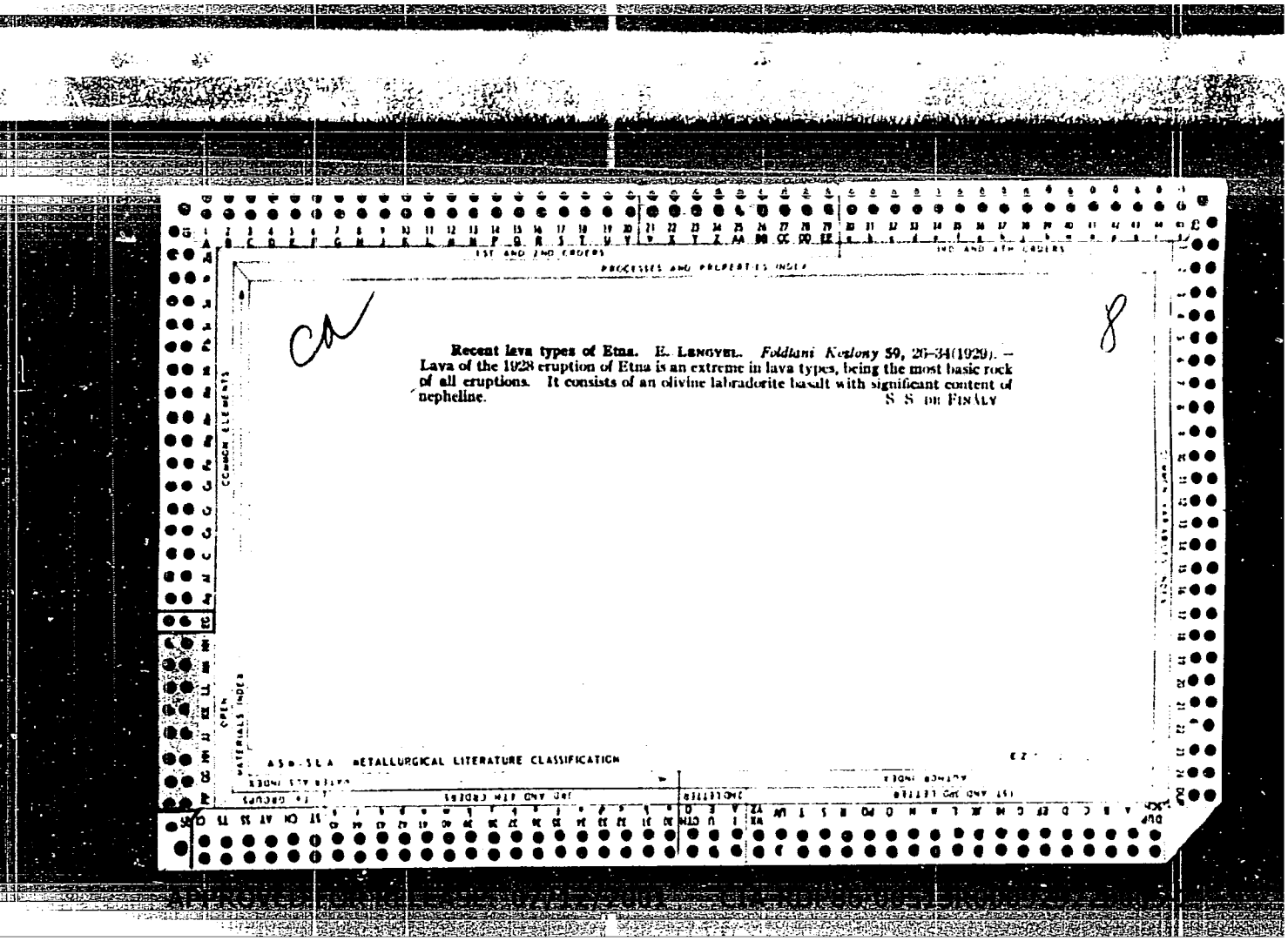
CSILIAG, I.; LENGYEL, E.

Martinovics and medical science (Physiology textbook by Ignac Martinovics, published in St. Petersburg 175 years ago). Orv. hetil. 105 no.42:20002-20004 O 18 '64.



The eruption of Etna in 1928 and its rock. E. Lengyel. *Acta Lit. ac Sci. Univ. Hung. Francisco-Josephinae, Sect. Chem., Mineral. et Phys.* 1, 128(1929); *Chem. Zentr.* 1930, II, 1854; cf. *C. A.* 25, 2048.—The lava of the eruption was thin liquid and accompanied by much NH_3, P and some S vapors. The rock is an olivine-basalt with porphyritic olivine, pyroxene, plagioclase and mainly labradorite. Ti is present as titanaugite and ilmenite. Magnetite forms small idiomorphous crystals. The rock contains much Na_2O, P_2O_5, TiO_2, Al_2O_3 and MgO. No clastic materials were found.

A. Burger



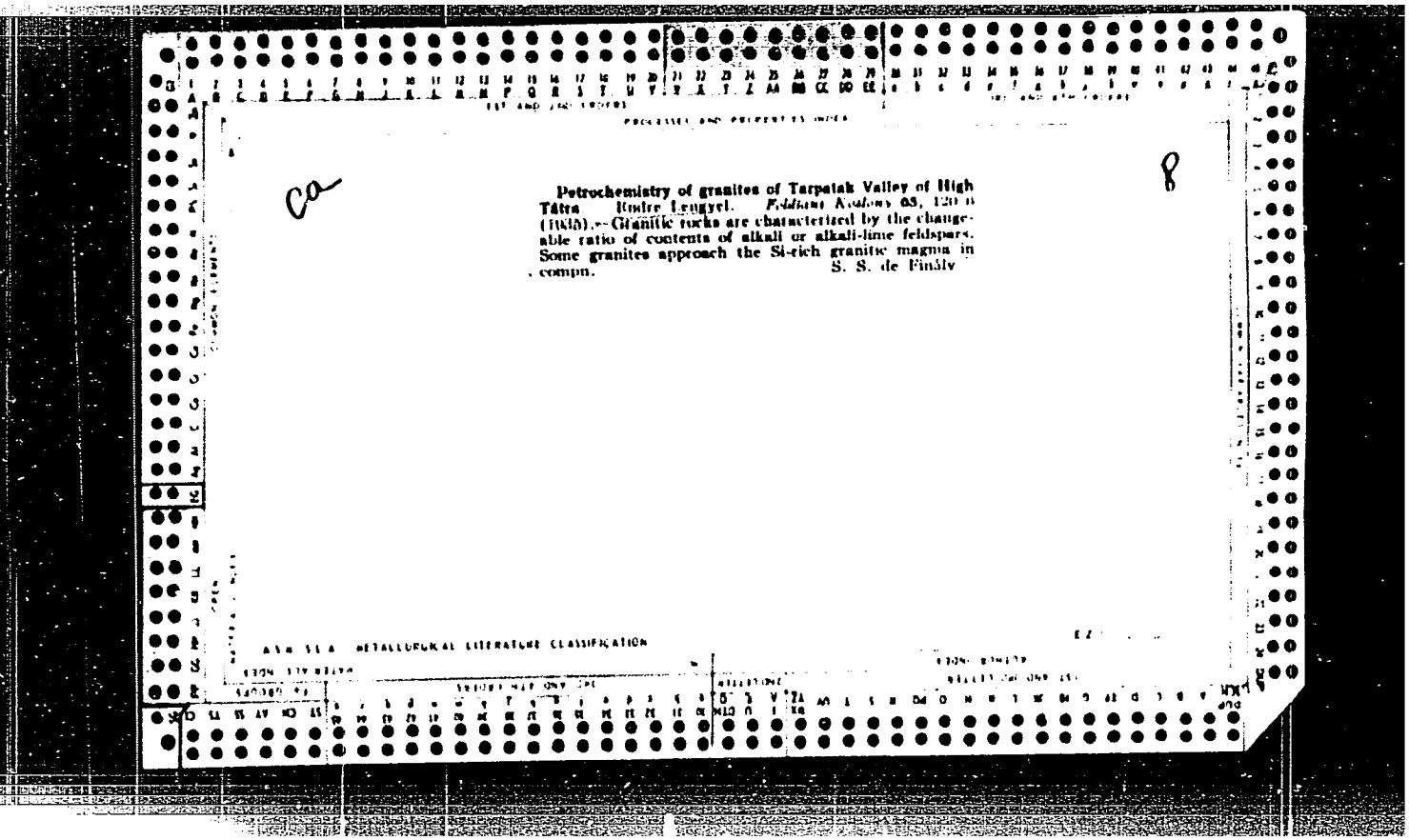
Recent lava types of Etna. E. LANGYEL. *Földtani Kozlony* 59, 26–34(1929). — Lava of the 1928 eruption of Etna is an extreme in lava types, being the most basic rock of all eruptions. It consists of an olivine labradorite basalt with significant content of nepheline.

S. S. DE FINALY

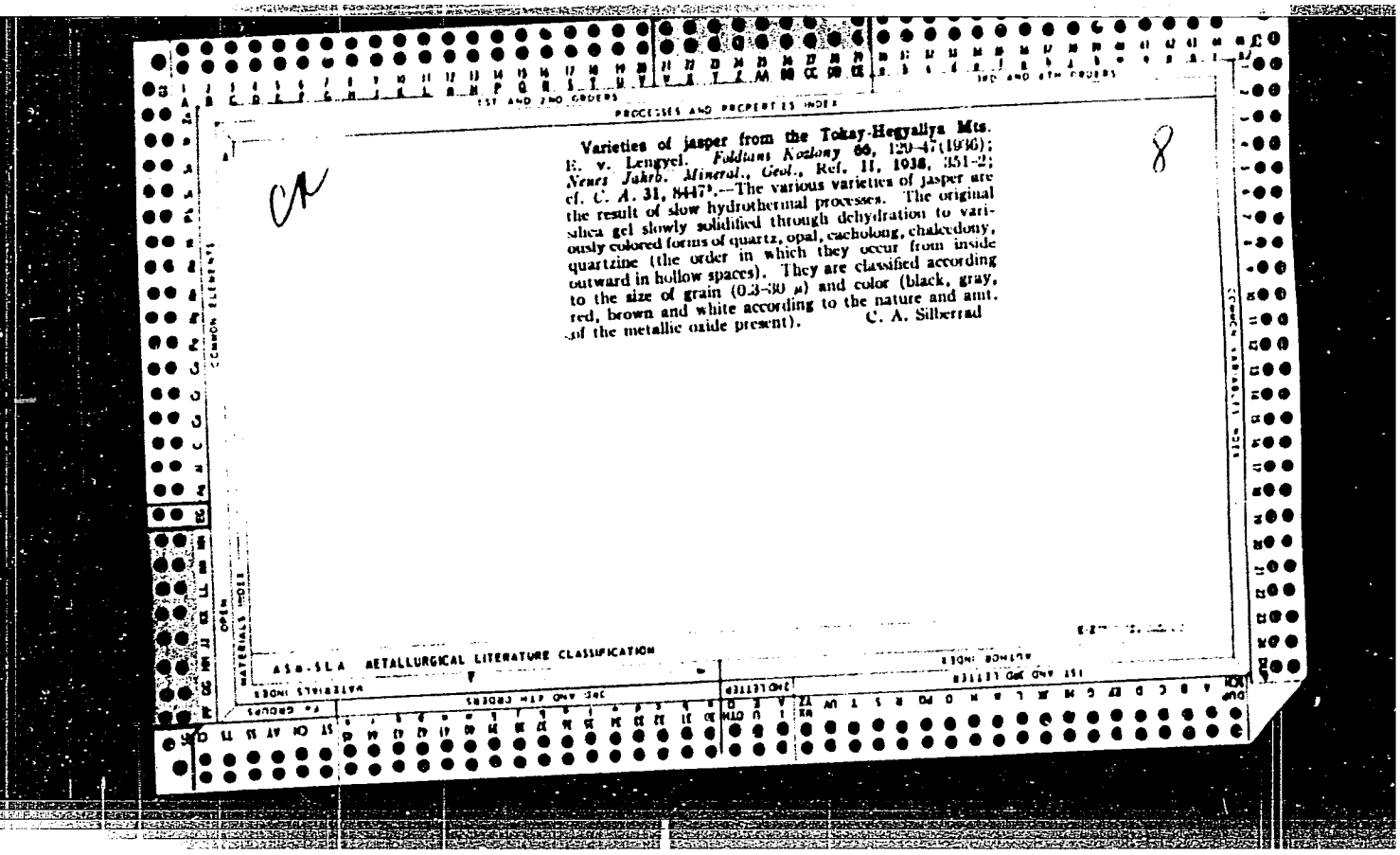
CA

Pyroxene andesite from Mount St. Vincent, Sárospatak. Endre Lengyel. *Földtani Kozlony* 65, 30-7(1935). Analyses of pyroxene-andesite rocks gave: SiO_2 58.18, 58.58, 60.88; TiO_2 0.31, 0.37, 0.28, Al_2O_3 10.61, 10.42, 18.04; Fe_2O_3 1.25, 3.02, 2.95; FeO 3.65, 3.55, 3.33, MnO 0.04, 0.08, 0.02; MgO 3.25, 3.85, 3.01; CaO 7.40, 7.52, 5.83; Na_2O 2.54, 4.18, 2.72; K_2O 1.34, 0.66, 0.62; H_2O+ 0.04, 0.07, 1.41; H_2O- 0.38, 0.24, 0.34; P_2O_5 0.53, 0.12, 0.35; CO_2 0.45, 0.16, 0.07, sums 99.96, 99.72, 100.07%. The Osann, Niggli and "American" classifica tions are given. S. S. de Finaly

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION



Petrochemistry of granites of Tarpatak Valley of High Tátra Endre Lengyel. *Földtani Közlony* 65, 120–6 (1935).—Granitic rocks are characterized by the changeable ratio of contents of alkali or alkali-lime feldspars. Some granites approach the Si-rich granitic magma in compn.
S. S. de Finály



PROCESSES AND PROPERTIES INDEX

Varieties of jasper from the Tokay-Hegyallya Mts. E. v. Lengyel. *Földtani Közlony* **66**, 129–47 (1936); *Neues Jahrb. Mineral., Geol.*, Ref. II, 1938, 351–2; cf. *C. A.* 31, 8447⁵.—The various varieties of jasper are the result of slow hydrothermal processes. The original silica gel slowly solidified through dehydration to variously colored forms of quartz, opal, cacholong, chalcedony, quartzine (the order in which they occur from inside outward in hollow spaces). They are classified according to the size of grain (0.3–30 μ) and color (black, gray, red, brown and white according to the nature and amt. of the metallic oxide present). C. A. Silberrad

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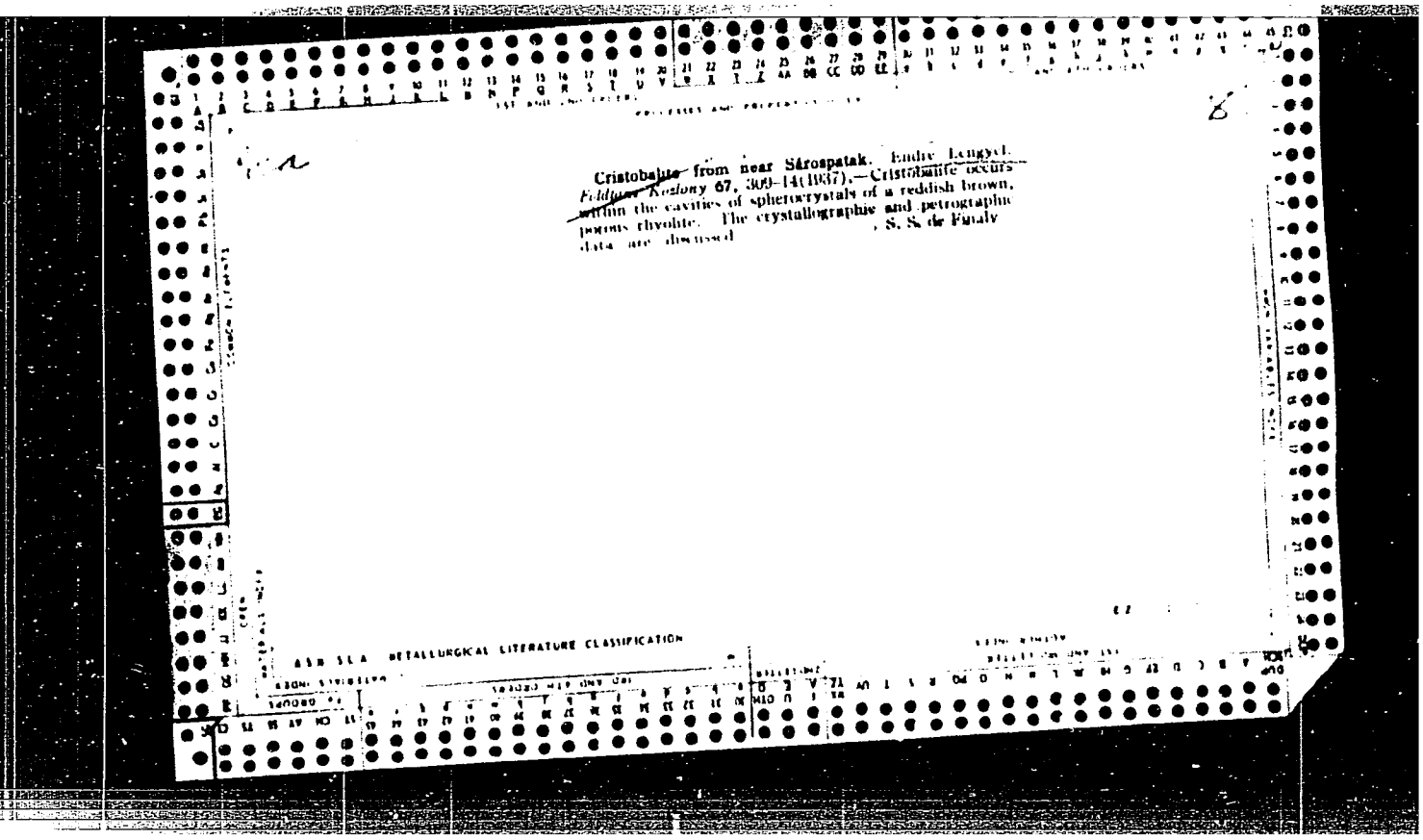
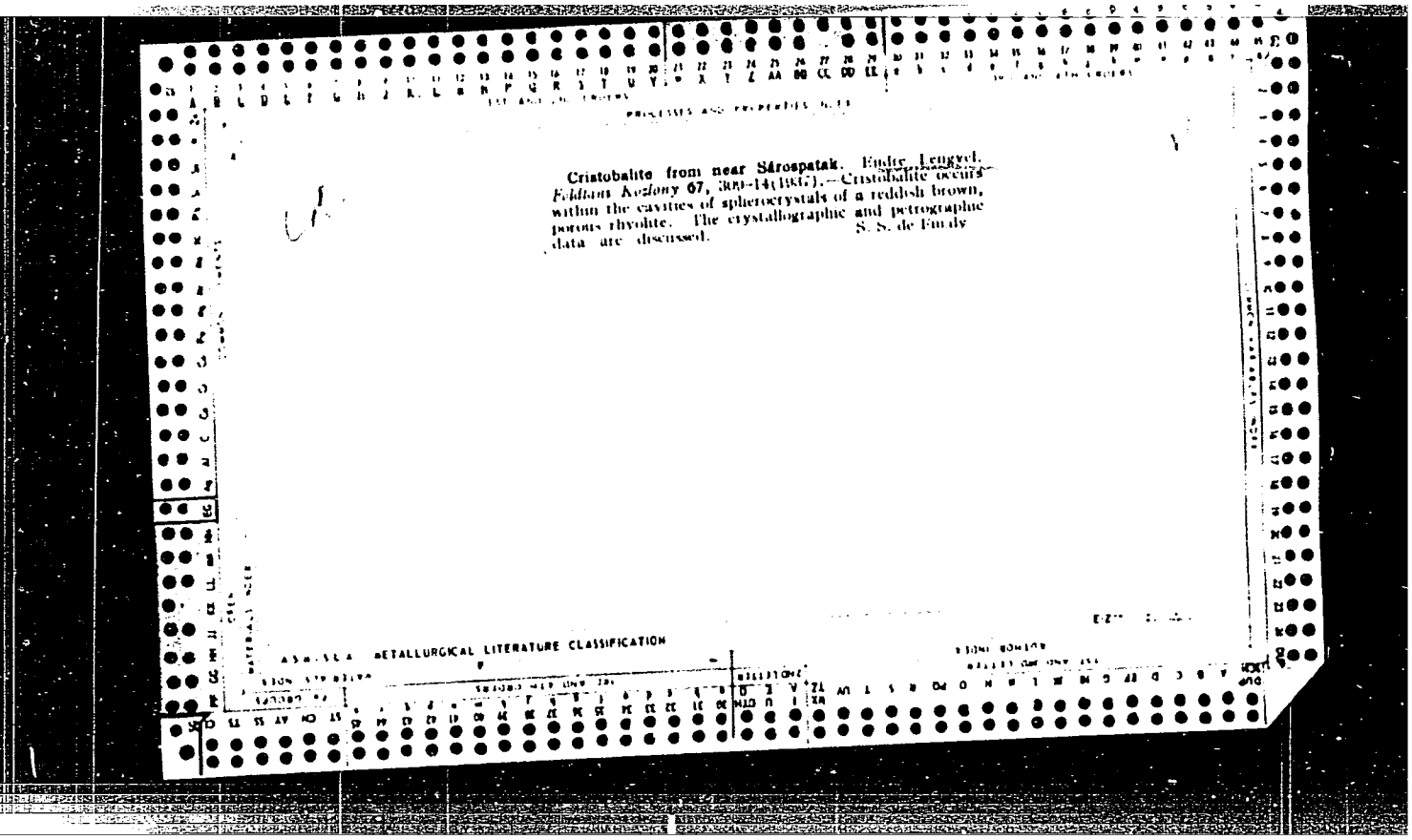
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION





Cristobalite from near Sárospatak. Endre Lengyel. *Földtani Közlony* **67**, 309-14(1937).—Cristobalite occurs within the cavities of spherocrystals of a reddish brown, porous rhyolite. The crystallographic and petrographic data are discussed. S. S. de Finály

METALLURGICAL LITERATURE CLASSIFICATION

Ca

8

Fluorescence of Hungarian minerals by filtered ultraviolet light. Endre Lengyel. *Földtani Közlöny* 73, 28[illegible] (1943).—Amethyst, antimonite, anglesite, bornite, chabazite, epidote, grossularite, hematite, cuprite, quartz, limonite, plagioclase, siderite, and sphalerite showed no fluorescence under filtered ultraviolet rays. Analcime, apatite, aragonite, orpiment, barite, celestite, dolomite, fluorite, galena, gypsum, halite, hyalite, chalcedony, calcite, chalcopyrite, magnetite, nepheline, opal, orthoclase, pyrargyrite, pyrite, realgar, titanite, and zircon showed fluorescence. István Finály

LENGYEL, Endre

2

Chemical Abst.
Vol. 48 No. 9
May 10, 1954
Mineralogical and
Geological Chemistry

(2) Geo

Structure of the andesitic volcanics of Dunazug Mountain. Endre Lengyel. *Magyar Állami Földt. Intézet, Évi Jelentése* 1951, 17-29 (Pub. 1953)(French summary).—Chem. analyses of 3 andesites are given. Michael Fleischer

LENGYEL, E.

"Traces of Manganic Ores in the Koszeg Mountains." p. 360, (FOLDTANI KOZLONY. BULLETIN OF THE HUNGARIAN BEOLOGICAL SOCIETY, Vol. 83, no. 10/12, Oct./Dec. 1953 Budapest, Hungary)

SO: Monthly List of East European Accessions, LC, Vol. 3, No. 5, May 1954/Unclassified

Lengel, Endre

Geology of the Nograd-Szokolya region, Börzsöny Mountains. Endre Lengyel. *Magyar Állami Földt. Intézet, Évi Jelentése 1954*, 105-20(Pub. 1956)(French summary).—The Fe deposits (8 chem. analyses) were formed by the weathering of dacites and garnetiferous andesites.
Michael Fleischer

LENGYEL, E.

Andesite in the environs of Kesztolc. p. 336

Vol. 85, no. 3, July/Sept. 1955

SOURCE: Monthly list of East European Accessions, (EEAL), Lc, Vol. 5, No. 3, March 1956

LENGYEL, ENDRE

HUNGARY/Cosmochemistry. Geochemistry. Hydrochemistry. D.

Abs Jour : Ref Zhur - Khimiya, No 11, 1958, 35767

Author : Lengyel Endre
Inst :
Title : Ferrous Formations of the Byorzhyon' Massif.

Orig Pub : Földt. közlöny, 1957, 87, No 2, 165-172

Abstract : The physical and chemical conditions of the formation of the brown iron-ore deposits of the Byorzhyon' Massif were investigated. A description is given of the geological structure of the region, of the conditions of stratification, and of the forms of the appearance of the ores. The ores were formed by means of erupted rocks (andesite, dacite). After the division of the limonite-hydrohematite-goethite ore during the course of past dehydration, there occurred a filling-up of fissures and cavities with mixtures of limonite, goethite, lepidocrocite, hematite, and siderite, with limonite predominating.

Card 1/2

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HUNGARY/Cosmochemistry. Geochemistry. Hydrochemistry. D.

Abs Jour : Ref Zhur - Khimiya, No 11, 1958, 35767

An important preliminary condition was the presence of a closed, drainless basin of the lagoon type, in the stagnant waters of which Fe ions accumulated in the presence of suitable absorbing or accumulating rock (sand, andesite tuff). Another favorable condition was a climate with a moderate amount of precipitation; abundant rainfall could have led to strong dilution of the basin's waters and to a decreased Fe content in them. The admission of thermal waters accelerated the separation of the silicate portion of the rocks, through the circulation of Fe and its accumulation along the crevices or on the surface. In every case, the accumulation of ores originated over impervious horizons (clay, compact andesite). Weathering played an important role in the enrichment of the ores.

Card 2/2

COUNTRY : Hungary

LENGYEL, E.

Geologic survey of the area of Sarospatak. p. 203.

A MAGYAR ALLAMI FOLDTANI INTEZET EVI JELENTESE. Budapest, Hungary, 1955/56 (Published 1959)

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

LENGYEL, E.

Geologic structure of the Tokaj Mountains in the area of Erkobenve-Tolcsva-Erdohorvati. p. 225.

A MAGYAR ALLAMI FOLDTANI INTEZET EVI JELENTESE. Budapest, Hungary, 1955/56 (Published 1959)

Monthly List of East European Accessions (EEAI) LC, Vol. 9, No. 2, Feb1960

Uncl

LENGYEL, Endre, okleveles mernok

Remark about the article entitled "Construction of the most economical roadways in various regions of Hungary." Melyepitestud szemle 13 no.4:186 Ap '63.

1. Ut-Vasuttervezo Vallalat iranyito tervezoje.

KULIN, Laszlo, dr.; KOVER, Bela, dr.; LENGYEL, Ferenc, dr.; LUDMANY, Konrad, dr.; POLYA, Imre, dr.; SZEKELY, Katalin, dr.

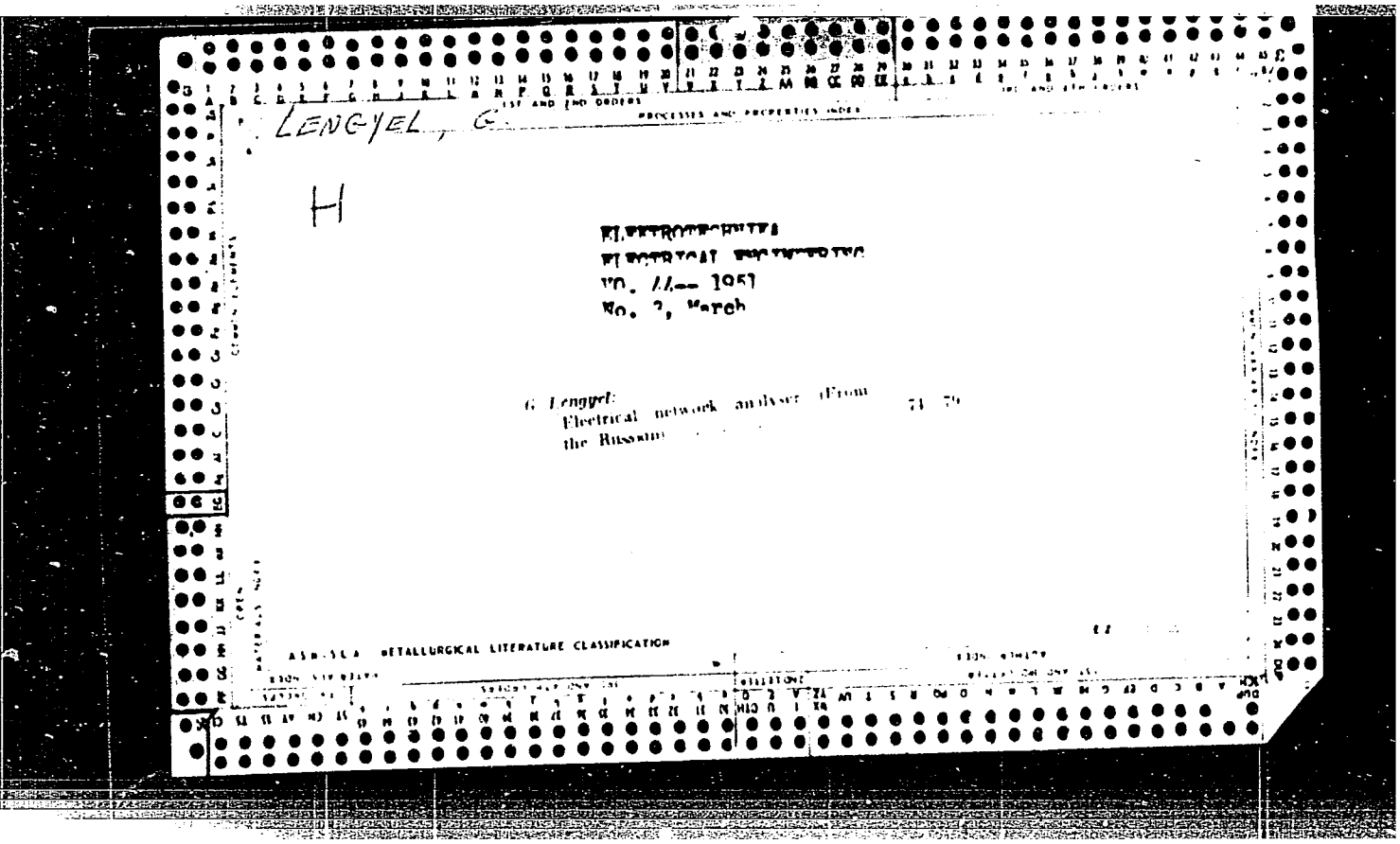
Cyclic penicillin therapy of scarlet fever as a prophylaxis against complications due to superinfection. Orv hetil 95 no.17:449-453 Ap '54. (EEAL 3:8)

1. A Debreceni Orvostudomanyi Egyetem Gyermekklinikajanak (igazgato: Kulin Laszlo dr. egyetemi tanar) kozlemenye.

(PENICILLIN, ther. use
*scarlet fever, cyclic ther. in prev. of compl.
(SCARLET FEVER, ther.
*penicillin, cyclic ther. in prev. of compl.)

GYONGYOSSY, Andor, dr.; LENGYEL, Ferenc, dr.

Infant care in the obstetrical ward of the district hospital at Nyiregyhaza, Hungary. Nepegeszsegugy 44 no.3:84-86 Mr '63.
(INFANT CARE) (INFANT MORTALITY)
(INFANT, NEWBORN, DISEASES)



LENGYEL, G.

A.

Protection

E 1 1

621.316.925.4 : 621.313.12

1123. **Earth fault protection of generators in resistance-earthed networks.** G. Lengyel. *Elektrotechnika*, 44, 335–44 (*Nov.*, 1951) In Hungarian.

On the basis of a theoretical analysis of the problem and experimental work, a relay consisting of a modified version of an electricity meter (a Ferraris instrument) was developed. It is suitable for protection against short-circuits to earth of 70–80% of the windings of generators and also for selective protection against short-circuits to earth of smaller generators working in parallel on a resistance-earthed network of ≤ 10 MVA capacity. The paper covers the theoretical calculations and the experimental results obtained, giving numerical values and oscillograms of the operation of such relays. Further work is being carried out to increase the sensitivity and the range of application of these simple and robust relays.

E. GROS

JPRS 52

Lengyel, G.

1/2

47 The tasks and structural design of the Hungarian
network analyzer — A hazai hálózati modell feladatai és
szerkezeti megoldása — P. Ignácz and G. Lengyel. — Sup-
plements: Electronic wattmeters — Elektronikus teljesít-
ményméré — Gy. Fáy. Dimensioning and calibrat-
ion of iron-core-reactors with air-gaps having linear
characterities — Lineáris jelleggörbéjű légréses fojtótekercsek méretezései és hitelesítése — A. Elek. (Electrical Engi-
neering — Elektrotechnika — Vol. 47, 1954. No. 1, pp
3—20, No. 2, pp. 50—55 and 57—61, 40 figs.)

The establishment of the network analyzer designed by the Hungarian Institute for Electrical Power Research

was investigated by the Large-scale development of the Hungarian power system. All the problems of network may be studied by means of the network analyzer, i.e. operating and limit conditions, balanced and unbalanced faults, as well as problems relating to steady-state and transient stability. The network analyzer is provided with adjustable elements, operates with 50 cps. in the article — according to economy published a negligible saving. This is due to the fact that the cost of transformer elements and capacitors is lower by about 20% at higher frequencies which is relatively small compared to the total expenses of the network analyzer, however, at 50 cps the construction and the measuring instruments are effected by electronic devices, the active power is measured by electronic instruments also developed by the Institute specially for this purpose. The determination of phase-angle is effected with a mechanical recorder by a compensating method. All these measurements may be effected at any point of the network under study. The end of the generator elements may be set by means of multi-tap transformers. In the network analyzer there are 20 generator elements, 40 load elements, 80 line elements, 6 autotransformers, 26 capacity elements to represent the network. The supplements describe the electronic wattmeter, as well as the frequency meter with air-gap and linear characteristics, applied in the network analyzer.

IENGYEL, G.

Miklos Vajta's A zarlati aram (Short-Circuit Current); a book review. p. 286
Vol. 49, No. 9 Sept. 1956. ELEKROTECHIKA. Budapest, Hungary.

SOURCE: East European List, (EEAL) Library of Congress Vol. 6, No. 1
January 1956.

LENGYEL, GY

TECHNOLOGY

PERIODICAL: MERES ES AUTOMATIKA, Vol. 6, no. 7/8, 1958

Lengyel, Gy. Model of electronic boiler. p. 229.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 2, February 1959, Unclass.

LENGYEL, Gabor, konstruktor mester (HA 5 AR)

Antenna spinner, operating table for amateur stations.
Radiotechnika 11 no.7:204-205 Jl '61.

LENGYEL, Gyorgy

Caterpillars ravaging our forests. Elet tud 17 no.24:749-750 17 Je '62.

1. Erdeszeti Tudomanyos Intezet munkatarsa.

LENGYEL, Gyorgy, tudomanyos munkatars

Questions relating to the disease of black pine trees in Hungary. Erdo 13 no.3:126-131 Mr '64.

1. Scientific Institute of Forestry, Budakeszi.