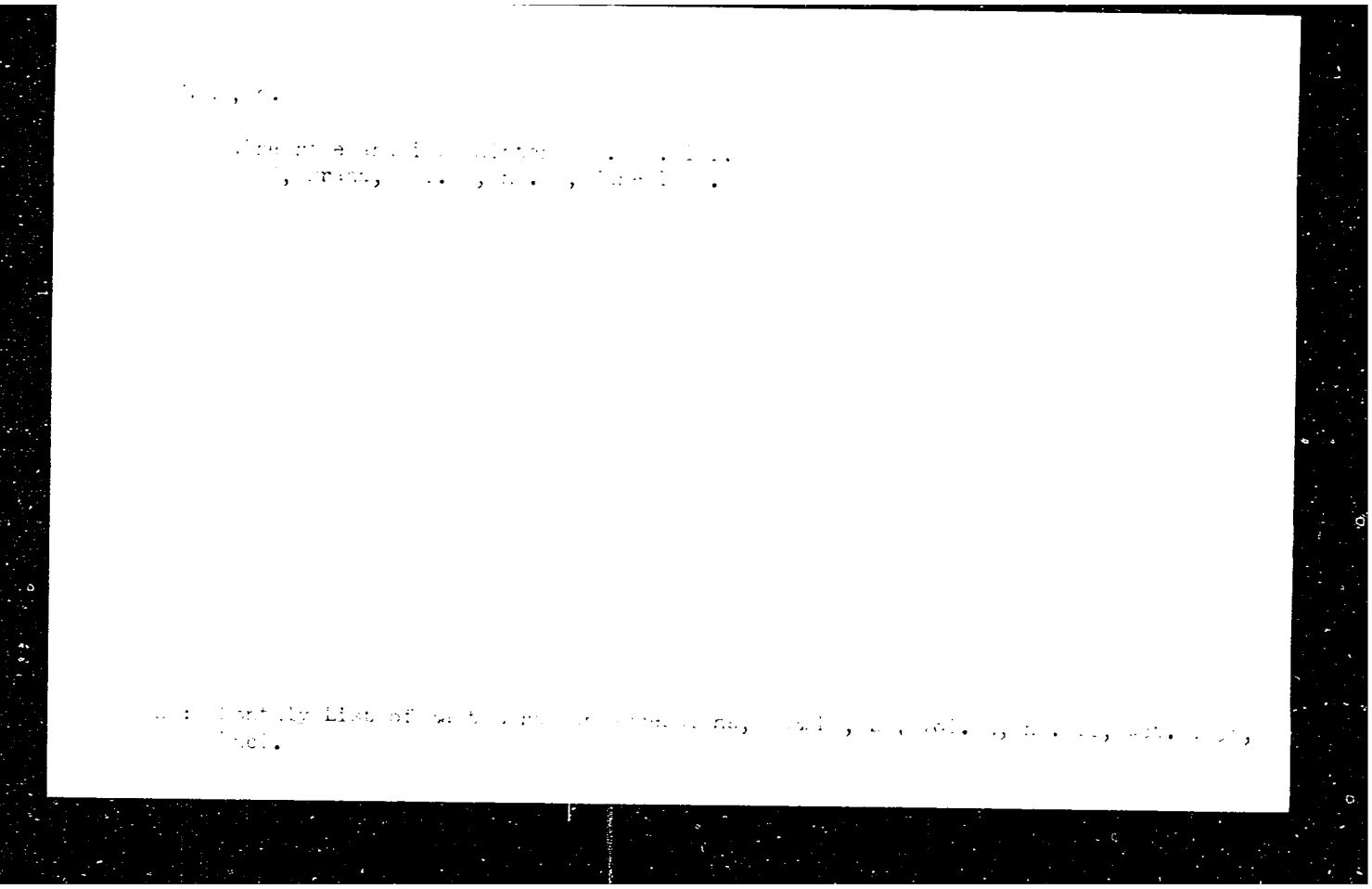


MAJER, L.:

On the possibilities of applying advanced methods in the glass industry. By L. Majer ...

SO: Szklo i Ceramika, #10, 1955, p 232.

MAJER, L

POLAND / Chemical Technology. Chemical Products and Their Applications. Glass. H

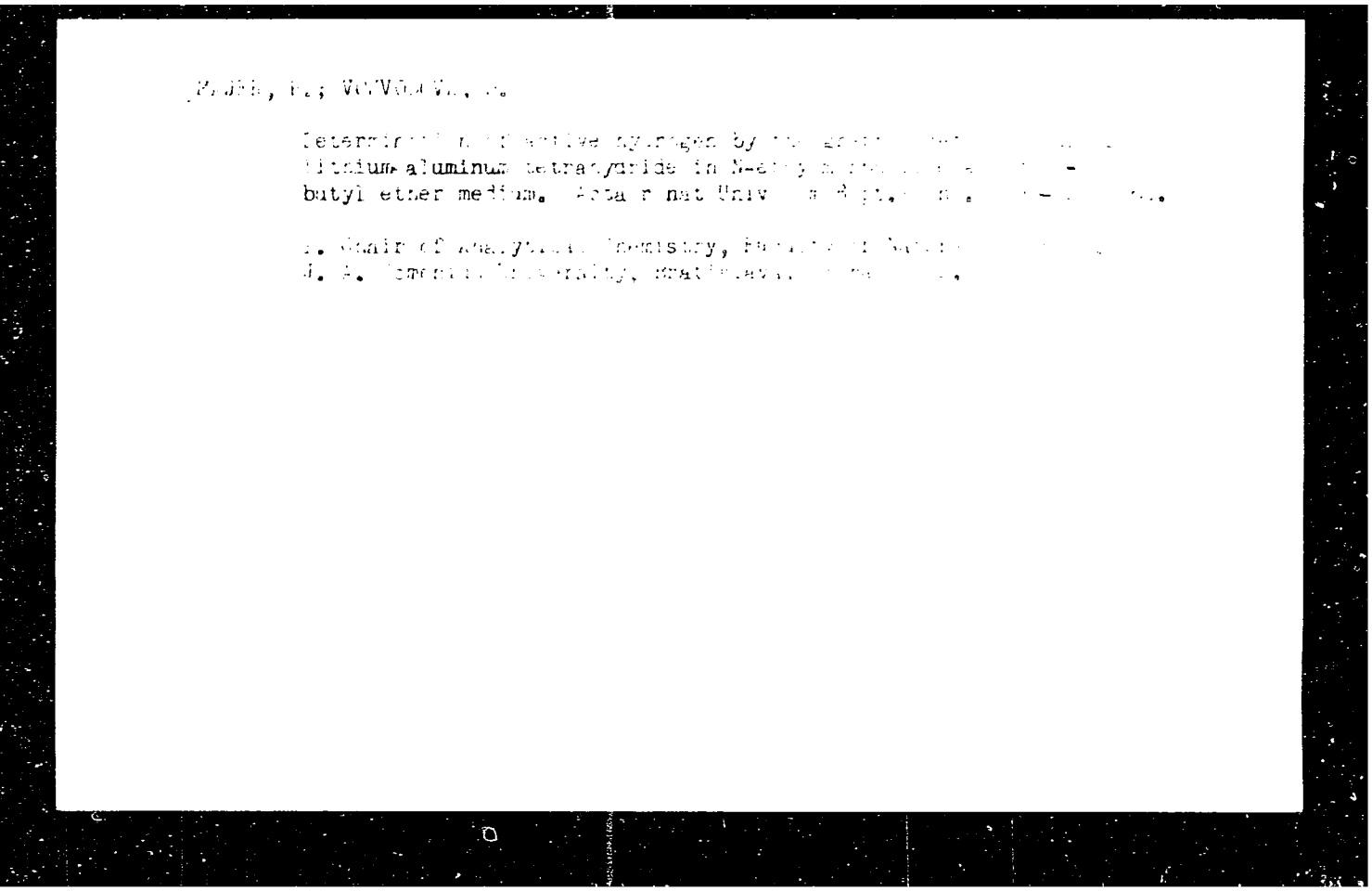
Abs Jour: Ref Zhur-Khimiya, 1959, No 4, 12592.

Author : Majer, Leszek.
Inst : Not given.
Title : New Method in the Glass Industry of Czechoslovakia.

Orig Pub: Szkło i ceram., 1958, 9, No 8, 226-232.

Abstract: Observational data recorded by Polish specialists who visited 4 Czech glass plants producing glass packing predominantly are described. In particular, sketches or descriptions are cited of: automation (A) of slag removal from the gas generators, A of formulations and weighing of glass batches and of the method of lining the batch containers of the vat glass furnaces, of the apparatus for cooling the glass brick at the mirror level of the

Card 1/2



L 1709-66 EWT(m)/EPF(c)/EWP(t)/EWP(b) IJP(c) JD

ACCESSION NR: AP5024159 CZ/0043/64/000/012/0900/0912

41
39
B

AUTHOR: Majer, P. (Mayer, P.)(Docent, Candidate of sciences)(Bratislava); Jurecek, M. (Yurechek, M.)(Professor, Doctor, Engineer)(Pardubice)

TITLE: Determination of active hydrogen in some nitro and nitroso compounds

SOURCE: Chemicke zvesti, no. 12, 1964, 900-912

TOPIC TAGS: hydrogen, gas analysis, gas analyzer, chemical kinetics, organic nitro compound, organic nitroso compound

ABSTRACT: Analytical methods using liberated gas measurement in a gas meter were investigated; as hydrogen source $LiAlH_4$ dissolved in N-ethylmorpholine and dibutylether was used. Kinetic study of the course of reaction showed that with some of the materials investigated it was possible to distinguish the reaction of the active hydrogen from the reaction of the nitro and nitroso groups with the reagent, and that therefore it is possible to determine active hydrogen in the presence of these groups. Orig. art. has: 14 graphs, 2 tables.

Card 1/2

L 1709-66

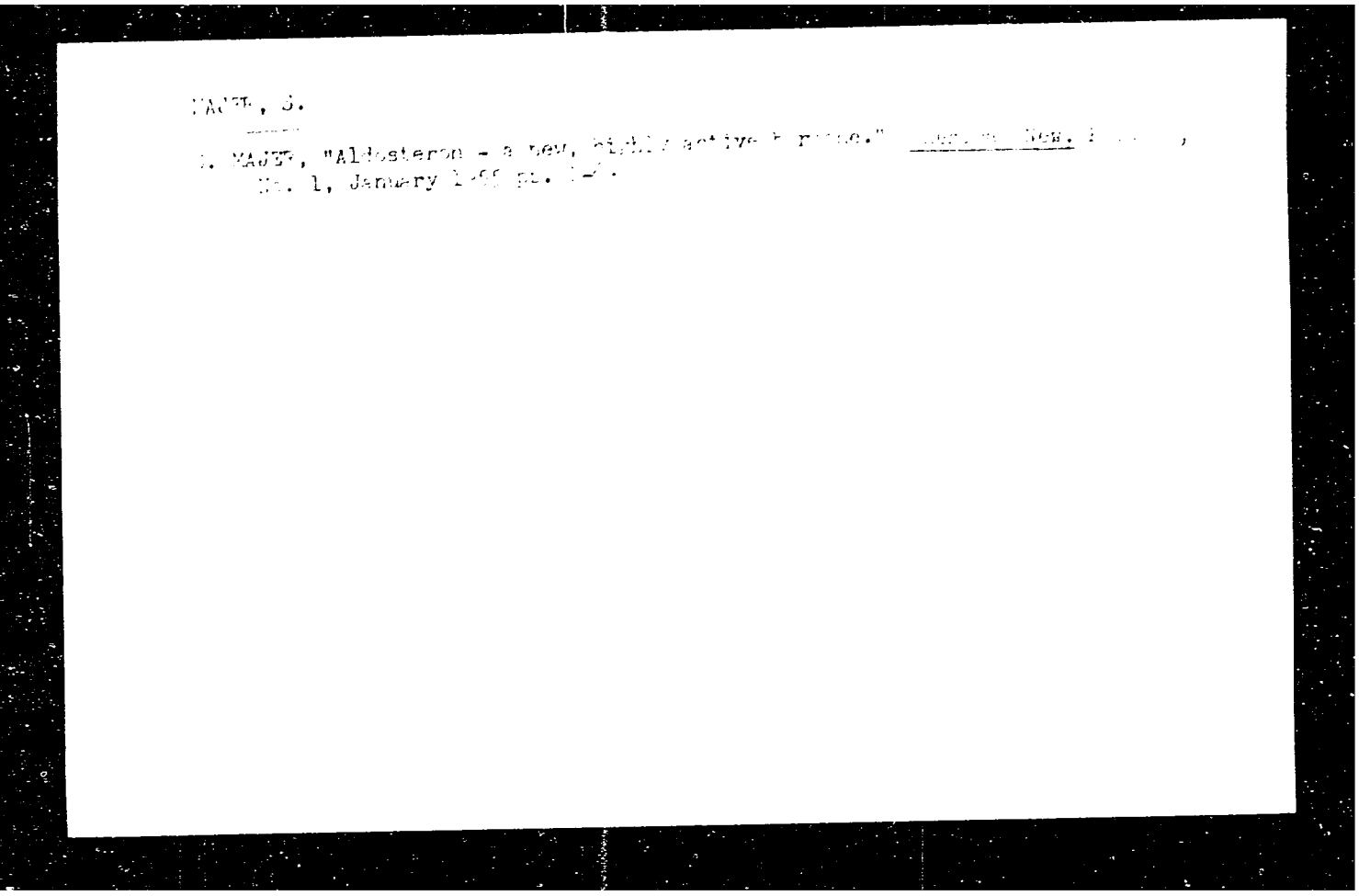
ACCESSION NR: AP5024159

2

ASSOCIATION: Katedra analytickej chemie Prirodovedeckej fakulty Univerzity Komenskeho, Bratislava (Department of Analytical Chemistry, Faculty of Natural Sciences, Comenius University); Katedra analytickej chemie Vysokej skoly chemicko-technologickej, Pardubice (Department of Analytical Chemistry College of Technical Chemistry

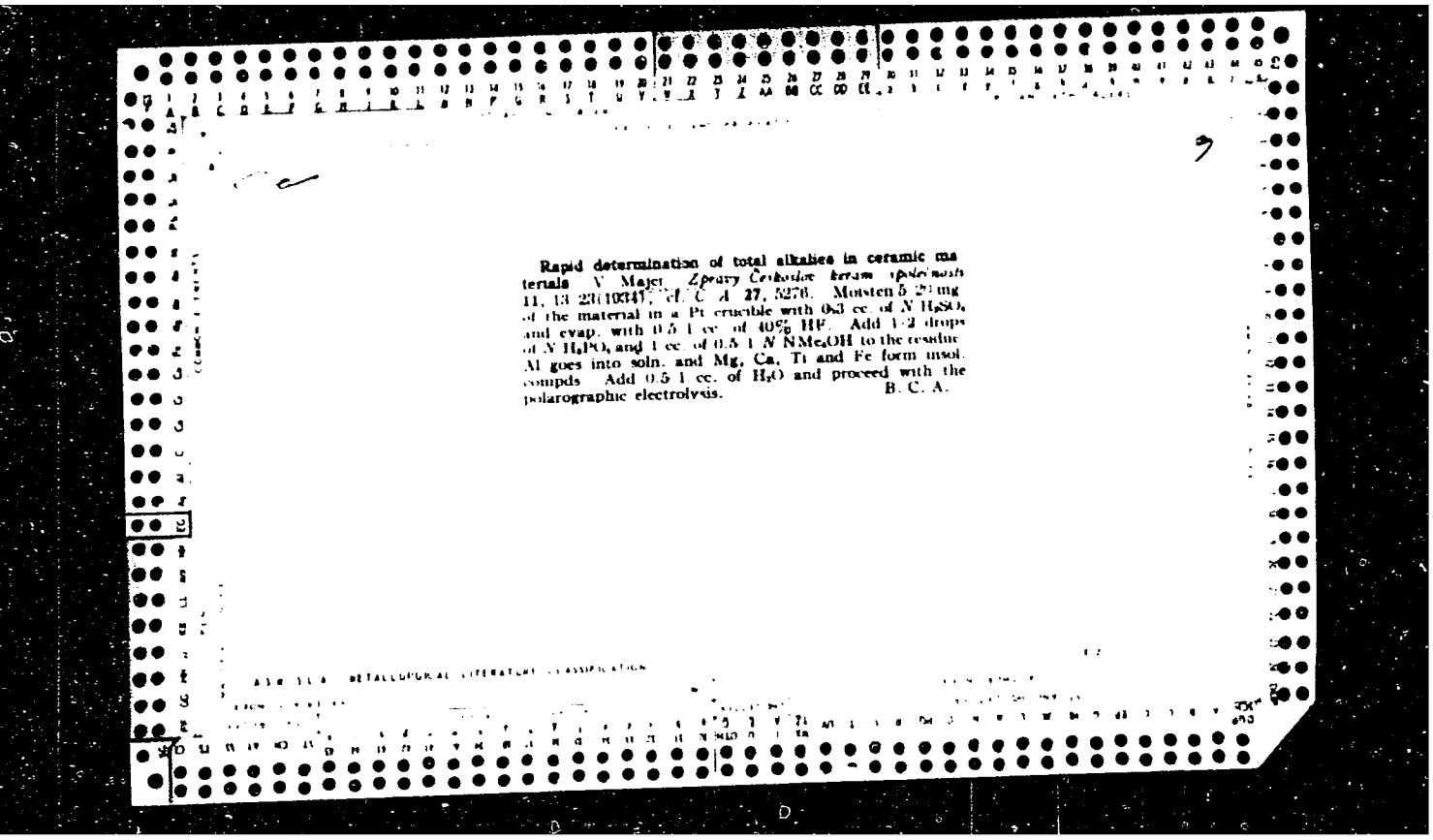
SUBMITTED: 15Feb63	ENCL: 00	SUB CODE: GC, GC
NR REF SOV: 000	OTHER: 035	JPRS

Card 2/2 DP

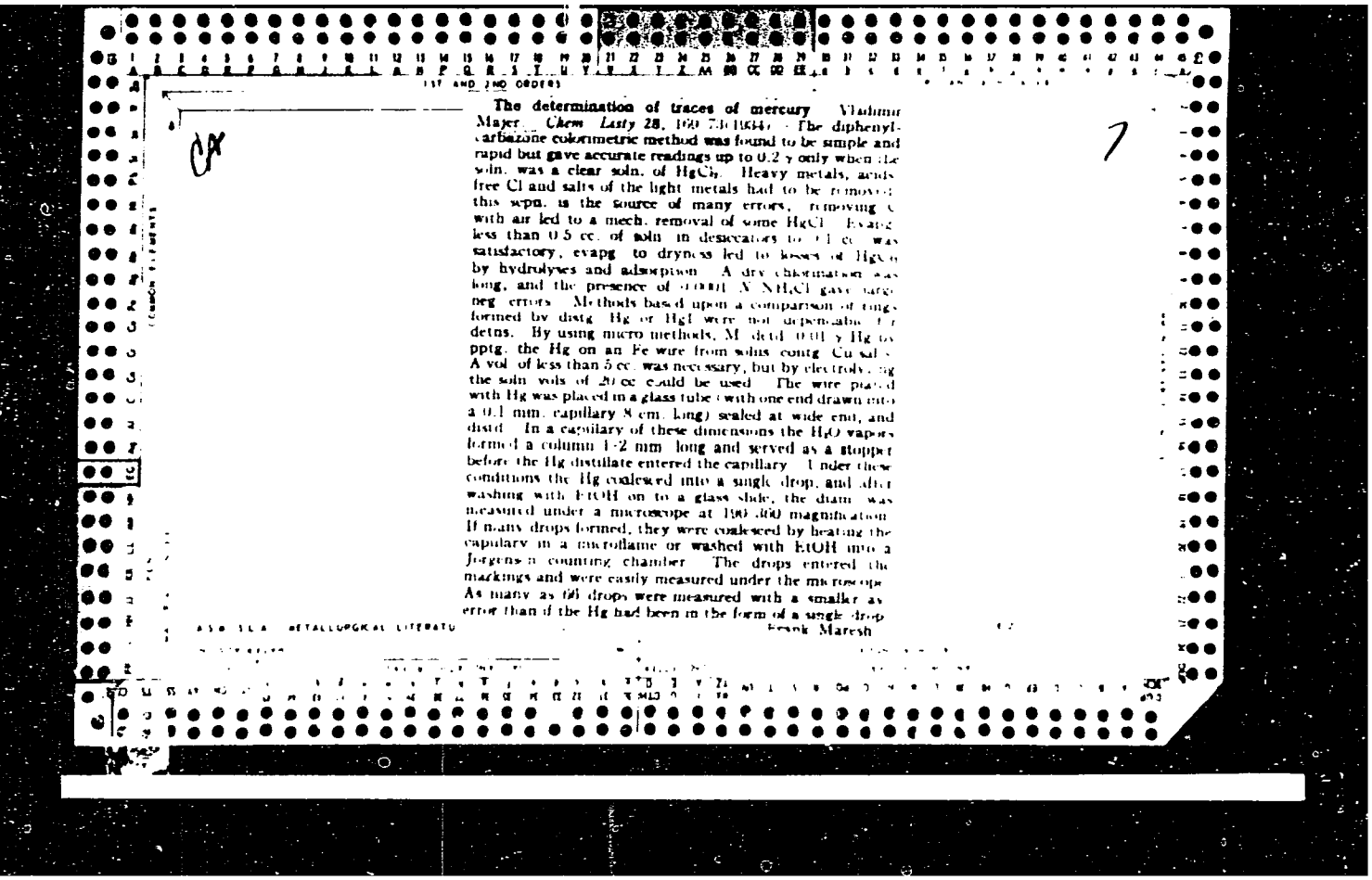


MAJER, J.

1. MAJER, "Aldosteron - a new, highly active [illegible]." [illegible]
No. 1, January [illegible].

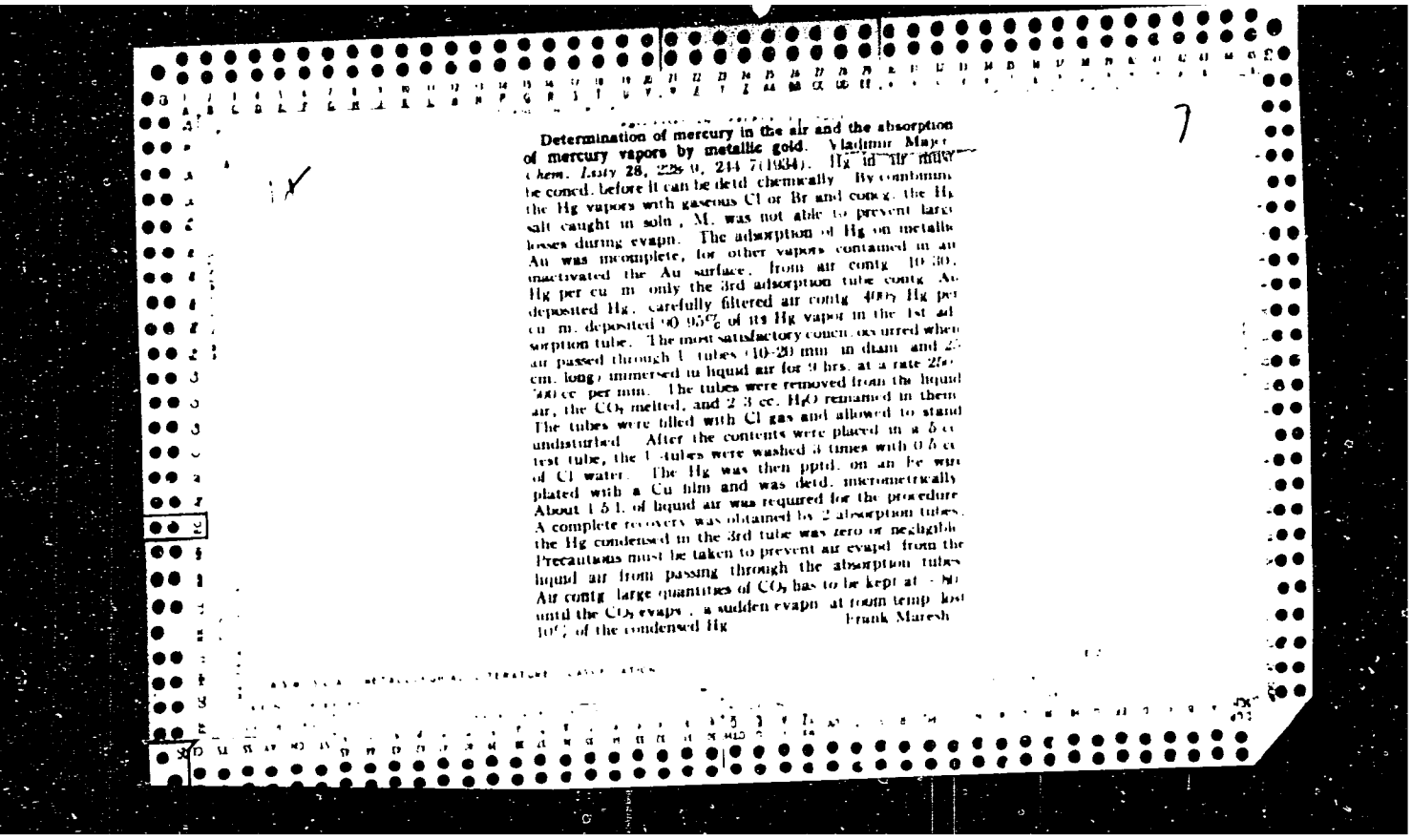


Rapid determination of total alkalies in ceramic materials V. Majer. *Zpravy Ceskoslov. keram. spolecnosti* 11, 13 230(1934); cf. *C. A.* **27**, 5276. Moisten 0.25 mg. of the material in a Pt crucible with 0.3 cc. of *N* H_2SO_4 and evap. with 0.5–1 cc. of 40% HF. Add 1–2 drops of *N* H_3PO_4 and 1 cc. of 0.5–1 *N* NMe_4OH to the residue. Al goes into soln. and Mg, Ca, Ti and Fe form insol. compds. Add 0.5–1 cc. of H_2O and proceed with the polarographic electrolysis. B. C. A.

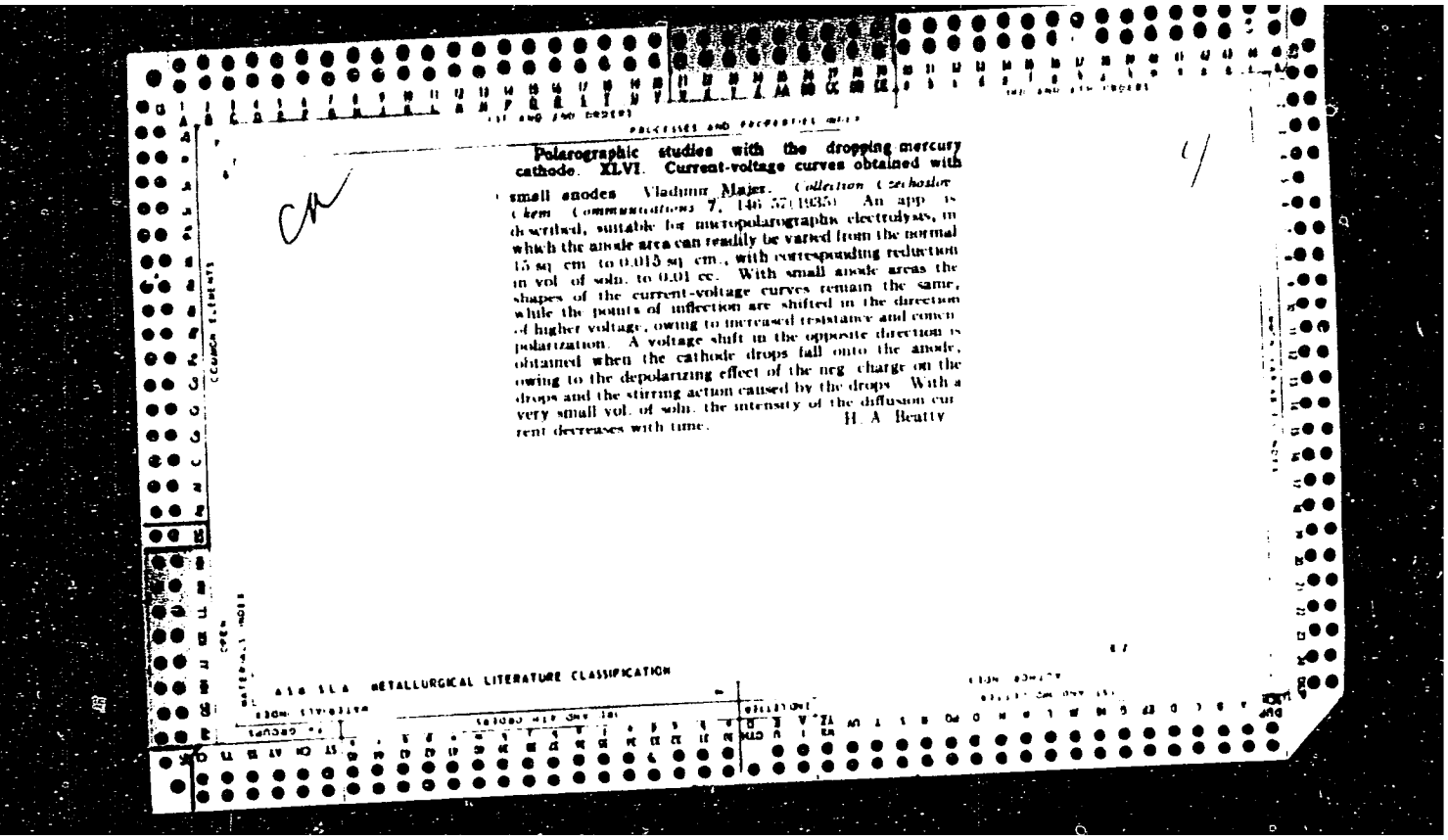


The determination of traces of mercury Vladimir Majer. *Chem. Listy* **28**, 169-73(1934). The diphenylcarbazone colorimetric method was found to be simple and rapid but gave accurate readings up to 0.2 γ only when the soln. was a clear soln. of $HgCl_2$. Heavy metals, acids, free Cl and salts of the light metals had to be removed; this sepn. is the source of many errors. Removing Cl with air led to a mech. removal of some $HgCl_2$. Evapg. less than 0.5 cc. of soln. in desiccators to 0.1 cc. was satisfactory, evapg. to dryness led to losses of $HgCl_2$ by hydrolyses and adsorption. A dry chlorination was long, and the presence of 0.0001 *N* NH_4Cl gave large neg. errors. Methods based upon a comparison of rings formed by distg. Hg or HgI were not dependable for detns. By using micro methods, Mn detd. 0.01 γ Hg by pptg. the Hg on an Fe wire from solns. contg. Cu salts. A vol. of less than 5 cc. was necessary, but by electrolyzing the soln. vols. of 20 cc. could be used. The wire plated with Hg was placed in a glass tube (with one end drawn into a 0.1 mm. capillary 8 cm. long) sealed at wide end, and distd. In a capillary of these dimensions the HgO vapors formed a column 1-2 mm. long and served as a stopper before the Hg distillate entered the capillary. Under these conditions the Hg coalesced into a single drop, and after washing with EtOH on to a glass slide, the diam. was measured under a microscope at 100-800 magnification. If many drops formed, they were coalesced by heating the capillary in a microflame or washed with EtOH into a Jorgensen counting chamber. The drops entered the markings and were easily measured under the microscope. As many as 60 drops were measured with a smaller average error than if the Hg had been in the form of a single drop.

Frank Maresh

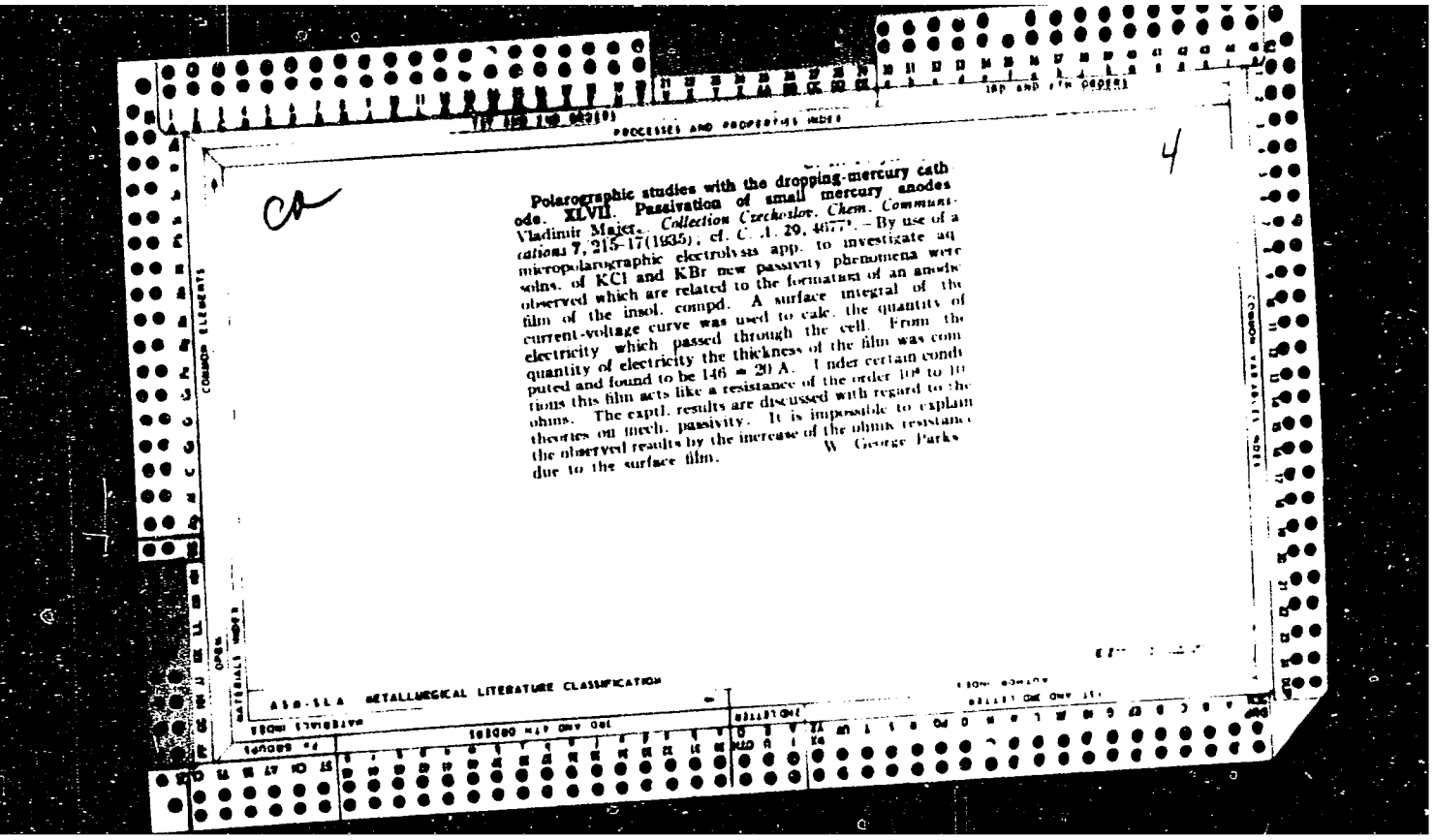


Determination of mercury in the air and the absorption of mercury vapors by metallic gold. Vladimir Majer. *Chem. Listy* **28**, 228-9, 244-7(1934). Hg in air must be concd. before it can be detd chemically. By combining the Hg vapors with gaseous Cl or Br and concg. the Hg salt caught in soln., M. was not able to prevent large losses during evapn. The adsorption of Hg on metallic Au was incomplete, for other vapors contained in air inactivated the Au surface. From air contg. 10-30 Hg per cu. m. only the 3rd adsorption tube contg. Au deposited Hg; carefully filtered air contg. 400γ Hg per cu. m. deposited 90-95% of its Hg vapor in the 1st adsorption tube. The most satisfactory concn. occurred when air passed through U tubes (10-20 mm. in diam. and 25 cm. long) immersed in liquid air for 9 hrs. at a rate 250-300 cc. per min. The tubes were removed from the liquid air, the CO_2 melted, and 2-3 cc. H_2O remained in them. The tubes were filled with Cl gas and allowed to stand undisturbed. After the contents were placed in a 5 cc. test tube, the U-tubes were washed 3 times with 0.5 cc. of Cl water. The Hg was then pptd. on an Fe wire plated with a Cu film and was detd. micrometrically. About 1.5 l. of liquid air was required for the procedure. A complete recovery was obtained by 2 absorption tubes; the Hg condensed in the 3rd tube was zero or negligible. Precautions must be taken to prevent air evapd. from the liquid air from passing through the absorption tubes. Air contg. large quantities of CO_2 has to be kept at -80° until the CO_2 evaps.; a sudden evapn. at room temp. lost 10% of the condensed Hg. Frank Maresh

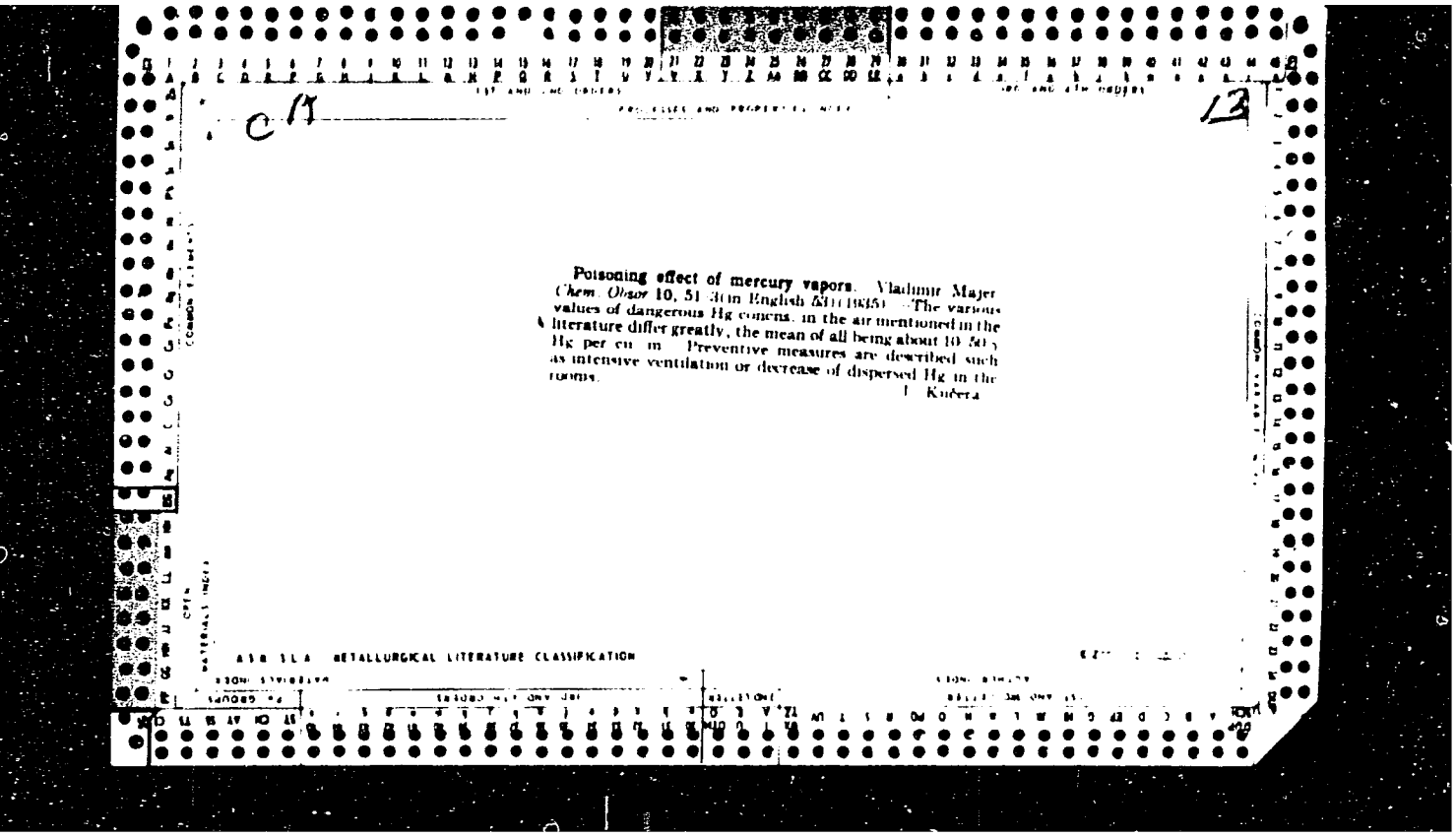


Polarographic studies with the dropping mercury cathode. XLVI. Current-voltage curves obtained with small anodes Vladimir Majer. *Collection Czechoslov. Chem. Communications* 7, 146-57(1935). An app. is described, suitable for micropolarographic electrolysis, in which the anode area can readily be varied from the normal 1.5 sq. cm. to 0.015 sq. cm., with corresponding reduction in vol. of soln. to 0.01 cc. With small anode areas the shapes of the current-voltage curves remain the same, while the points of inflection are shifted in the direction of higher voltage, owing to increased resistance and concn. polarization. A voltage shift in the opposite direction is obtained when the cathode drops fall onto the anode, owing to the depolarizing effect of the neg. charge on the drops and the stirring action caused by the drops. With a very small vol. of soln. the intensity of the diffusion current decreases with time. H. A. Beatty

A1g 51A METALLURGICAL LITERATURE CLASSIFICATION

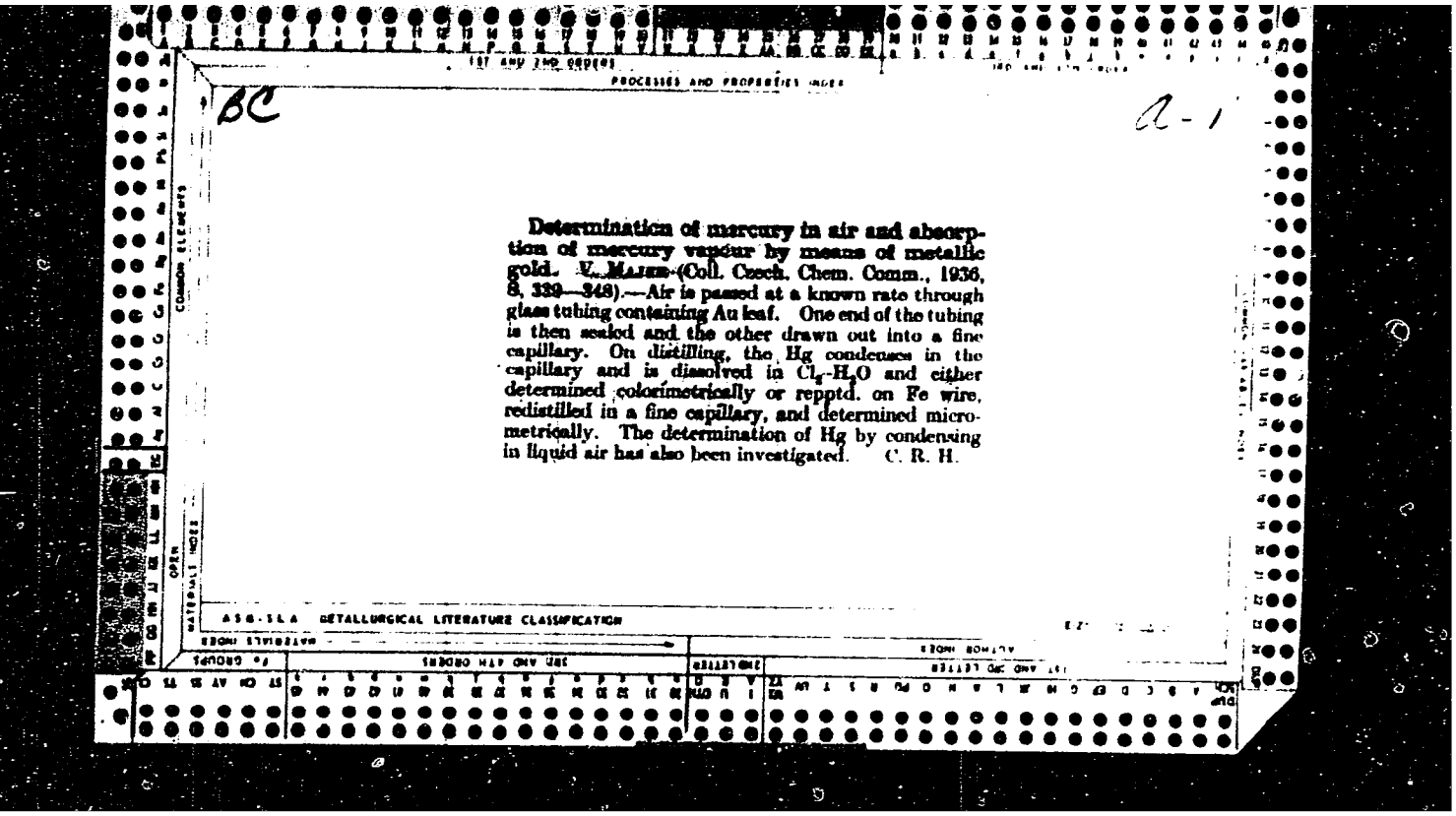


Polarographic studies with the dropping-mercury cath ode. XLVII. Passivation of small mercury anodes
Vladimir Majer. *Collection Czechoslov. Chem. Communications* **7**, 215–17(1935); cf. C. A. 29, 4077⁹. – By use of a micropolarographic electrolysis app. to investigate aq solns. of KCl and KBr new passivity phenomena were observed which are related to the formation of an anodic film of the insol. compd. A surface integral of the current-voltage curve was used to calc. the quantity of electricity which passed through the cell. From the quantity of electricity the thickness of the film was computed and found to be 146 ± 20 A. Under certain conditions this film acts like a resistance of the order 10^8 to 10^9 ohms. The exptl. results are discussed with regard to the theories on mech. passivity. It is impossible to explain the observed results by the increase of the ohmic resistance due to the surface film.
W George Parks



Poisoning effect of mercury vapors. Vladimir Majer. *Chem. Obzor* 10, 51-3(in English 53)(1935).—The various values of dangerous Hg concns. in the air mentioned in the literature differ greatly, the mean of all being about 10 .5(?) Hg per cu. m. Preventive measures are described such as intensive ventilation or decrease of dispersed Hg in the rooms.

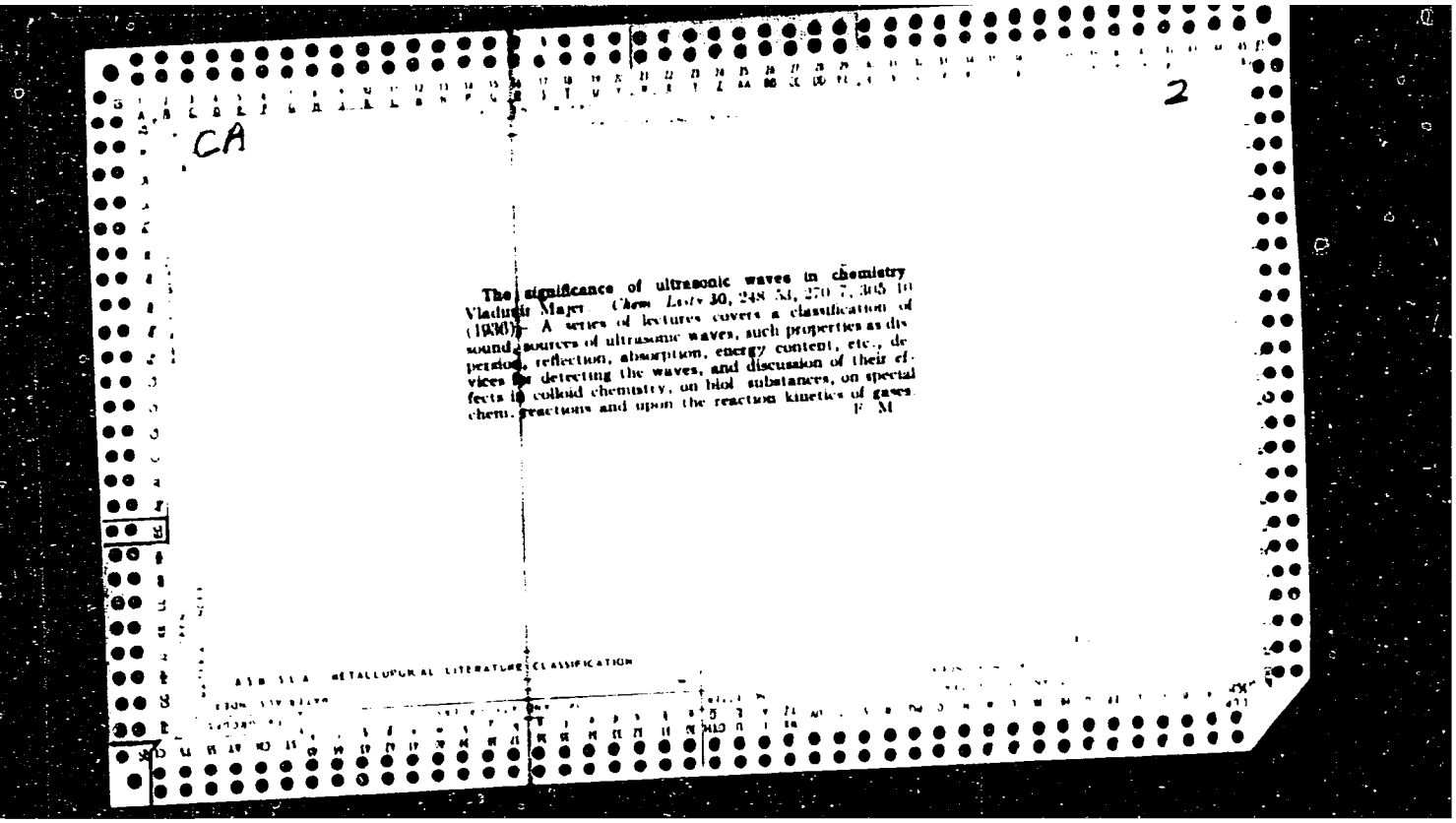
J. Kuřera



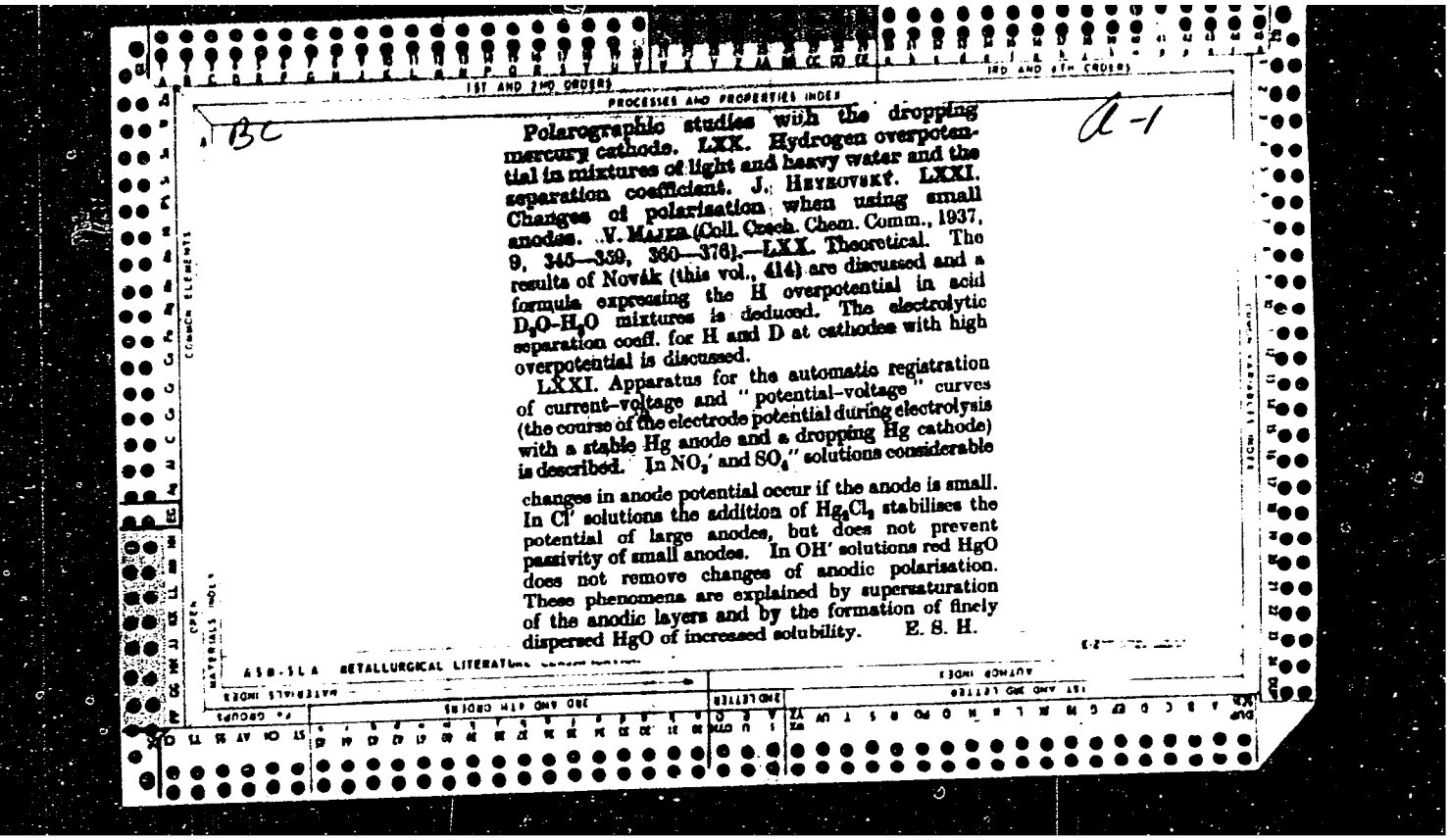
BC

A-1

Determination of mercury in air and absorption of mercury vapour by means of metallic gold. V. Majer.—(Coll. Czech. Chem. Comm., 1936, 8, 339—348).—Air is passed at a known rate through glass tubing containing Au leaf. One end of the tubing is then sealed and the other drawn out into a fine capillary. On distilling, the Hg condenses in the capillary and is dissolved in Cl_2-H_2O and either determined colorimetrically or repptd. on Fe wire, redistilled in a fine capillary, and determined micrometrically. The determination of Hg by condensing in liquid air has also been investigated. C. R. H.



The significance of ultrasonic waves in chemistry. Vladimir Majer. *Chem. Listy* 30, 248-51, 270-7, 305-10 (1936). A series of lectures covers a classification of sound, sources of ultrasonic waves, such properties as dispersion, reflection, absorption, energy content, etc., devices for detecting the waves, and discussion of their effects in colloid chemistry, on biol. substances, on spectral chem. reactions and upon the reaction kinetics of gases. F. M.



PROCESSES AND PROPERTIES INDEX

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

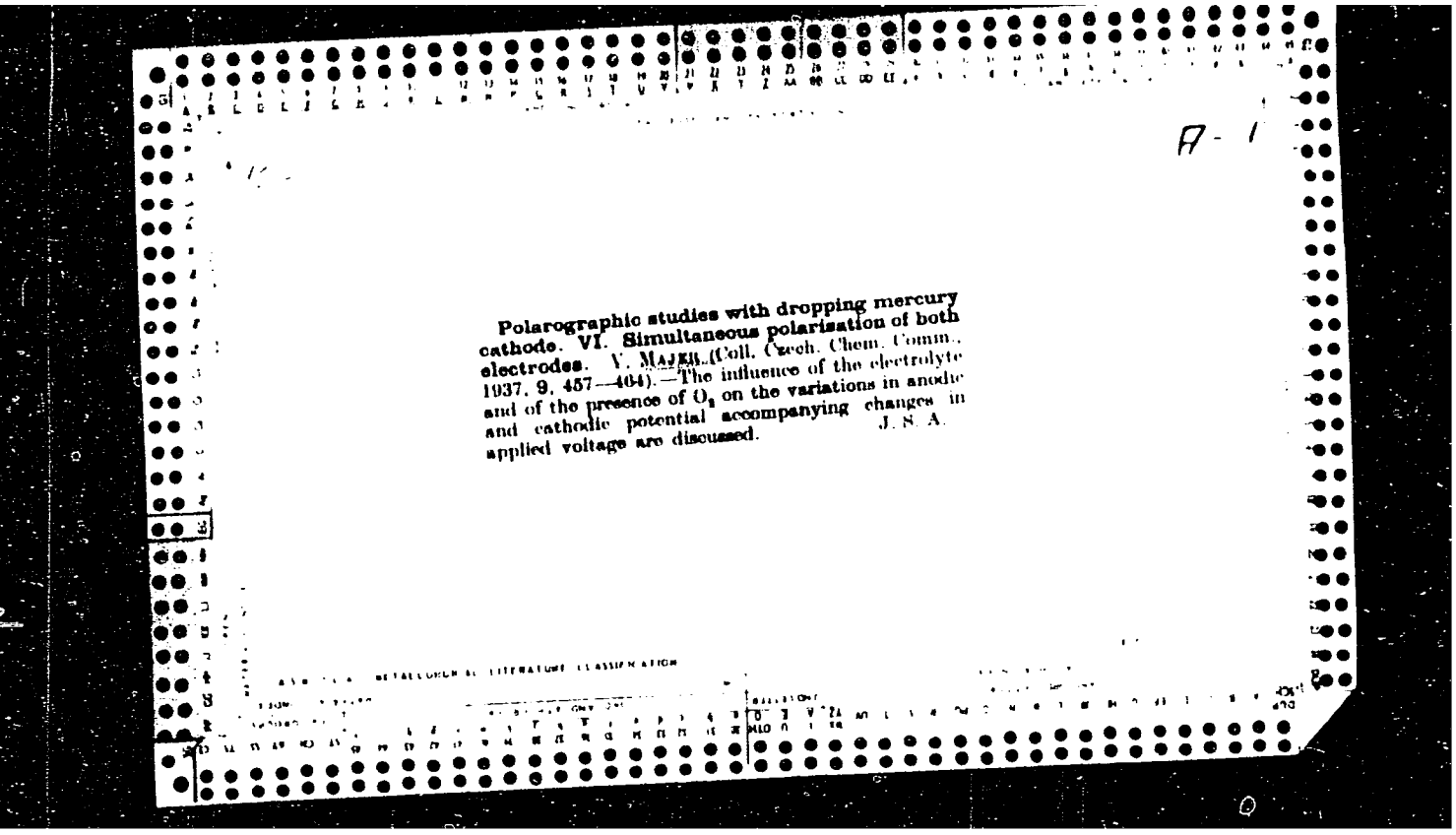
BC

A-1

Polarographic studies with the dropping mercury cathode. LXX. Hydrogen overpotential in mixtures of light and heavy water and the separation coefficient. J. HEYROVSKÝ. LXXI. Changes of polarisation when using small anodes. V. MAJER (Coll. Czech. Chem. Comm., 1937, 9, 345—359, 360—376).—LXX. Theoretical. The results of Novák (this vol., 414) are discussed and a formula expressing the H overpotential in acid D_2O–H_2O mixtures is deduced. The electrolytic separation coeff. for H and D at cathodes with high overpotential is discussed.

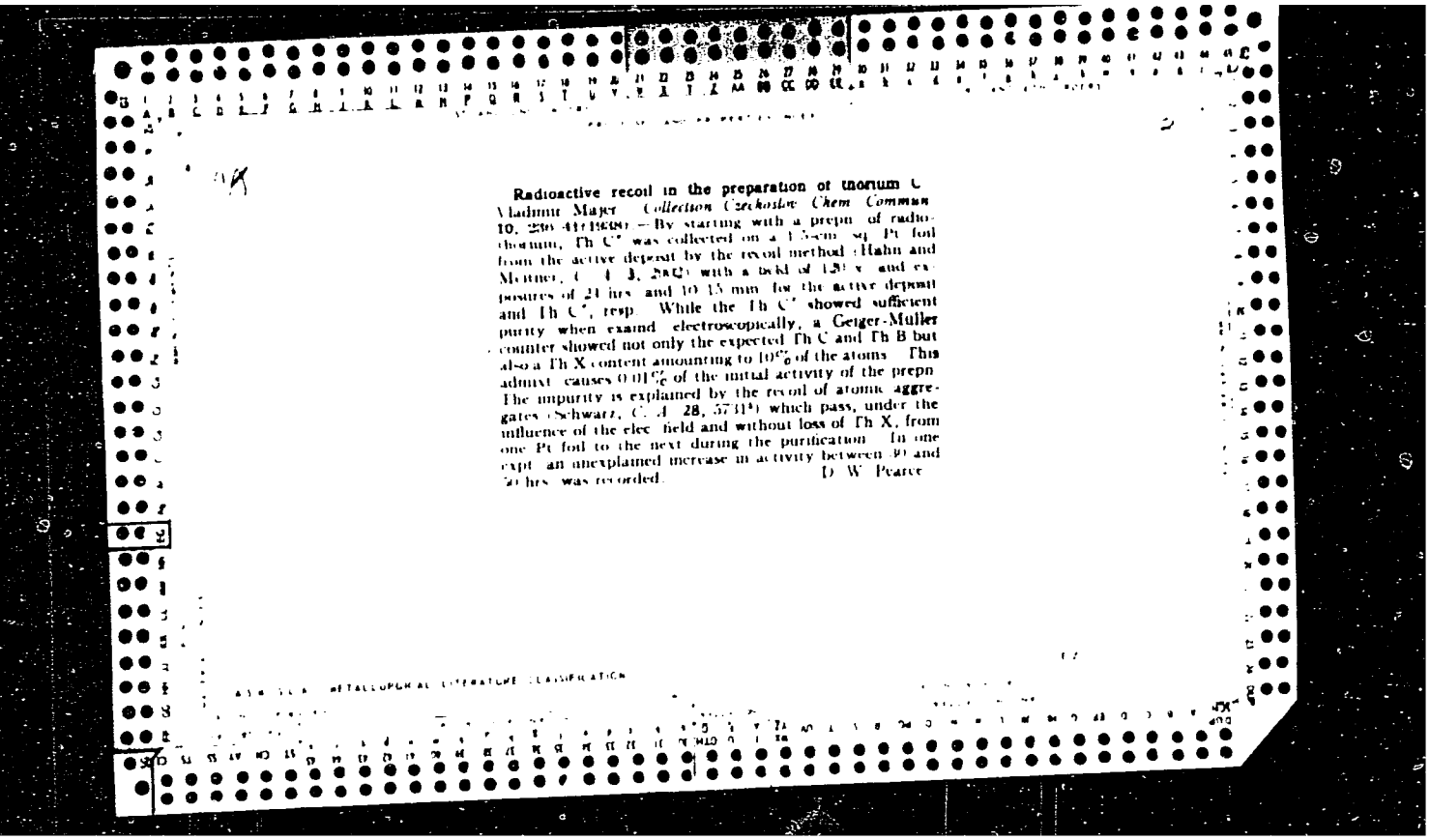
LXXI. Apparatus for the automatic registration of current–voltage and "potential–voltage" curves (the course of the electrode potential during electrolysis with a stable Hg anode and a dropping Hg cathode) is described. In NO_3' and SO_4'' solutions considerable changes in anode potential occur if the anode is small. In Cl' solutions the addition of Hg_2Cl_2 stabilises the potential of large anodes, but does not prevent passivity of small anodes. In OH' solutions red HgO does not remove changes of anodic polarisation. These phenomena are explained by supersaturation of the anodic layers and by the formation of finely dispersed HgO of increased solubility. E. S. H.

A58-SLA METALLURGICAL LITERATURE



A-1

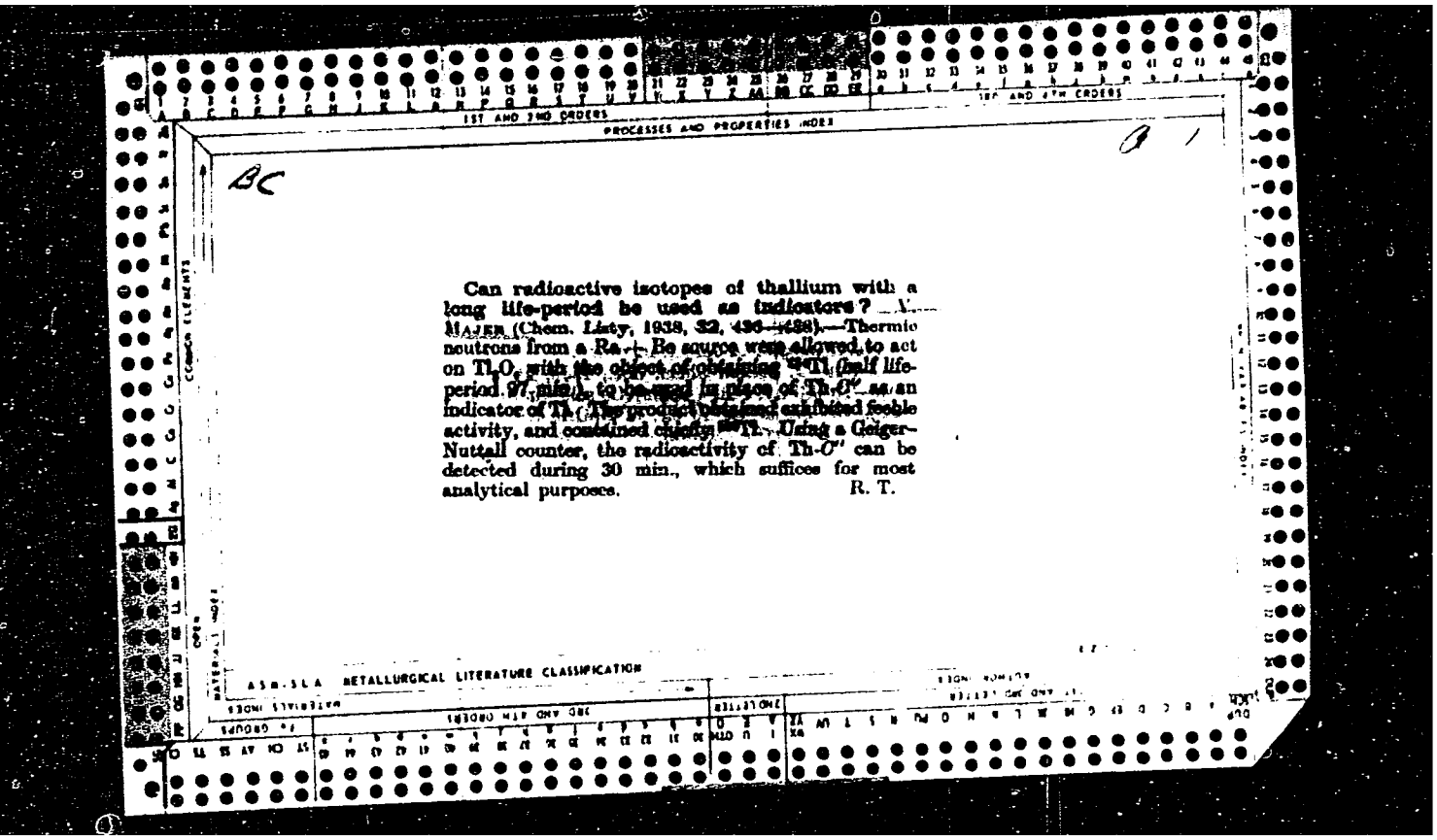
Polarographic studies with dropping mercury cathode. VI. Simultaneous polarisation of both electrodes. V. MAJER (Coll. Czech. Chem. Comm., 1937, 9, 457—464).—The influence of the electrolyte and of the presence of O_2 on the variations in anodic and cathodic potential accompanying changes in applied voltage are discussed. J. S. A.



Radioactive recoil in the preparation of thorium C

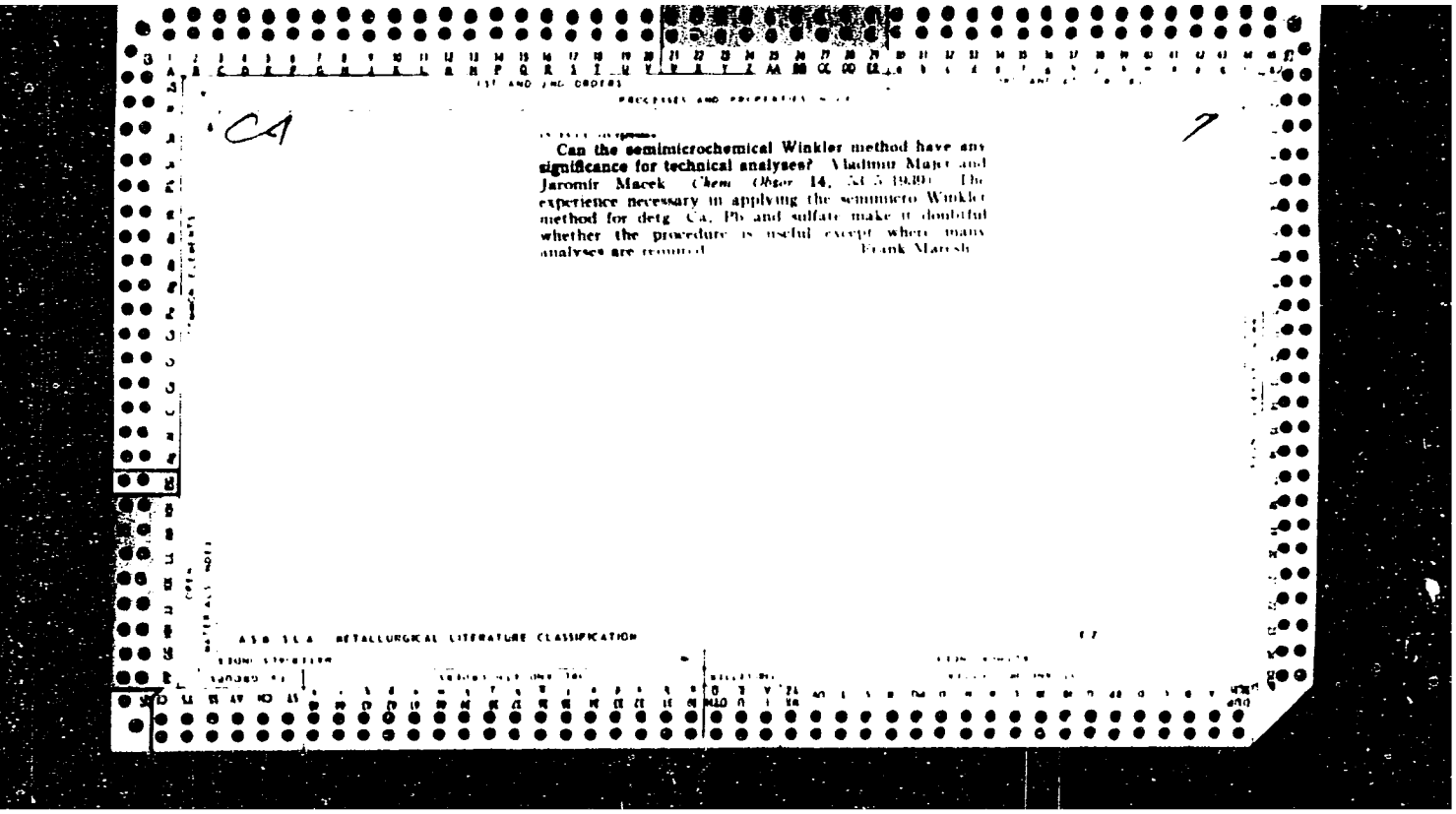
Vladimir Majer. *Collection Czechoslov. Chem. Commun.* 10, 230-41(1938).—By starting with a prepn. of radiothorium, Th C″ was collected on a 1.5-cm. sq. Pt foil from the active deposit by the recoil method (Hahn and Meitner, C. A. 3, 2802) with a field of 1.5 v. and exposures of 24 hrs. and 10-15 min. for the active deposit and Th C″, resp. While the Th C″ showed sufficient purity when examd. electroscopically, a Geiger-Müller counter showed not only the expected Th C and Th B but also a Th X content amounting to 10% of the atoms. This admixt. causes 0.01% of the initial activity of the prepn. The impurity is explained by the recoil of atomic aggregates (Schwarz, C. A. 28, 5731[1]) which pass, under the influence of the elec. field and without loss of Th X, from one Pt foil to the next during the purification. In one expt. an unexplained increase in activity between 40 and 50 hrs. was recorded.

D. W. Pearce



BC

Can radioactive isotopes of thallium with a long life-period be used as indicators? V. MAJER (Chem. Listy, 1938, 32, 436—438).—Thermic neutrons from a Ra + Be source were allowed to act on Tl_2O_3 with the object of obtaining ^{206}Tl (half life-period 97 min.) to be used in place of Th-*O*" as an indicator of Th. The product obtained exhibited feeble activity, and contained chiefly ^{204}Tl. Using a Geiger-Nuttall counter, the radioactivity of Th-*O*" can be detected during 30 min., which suffices for most analytical purposes. R. T.

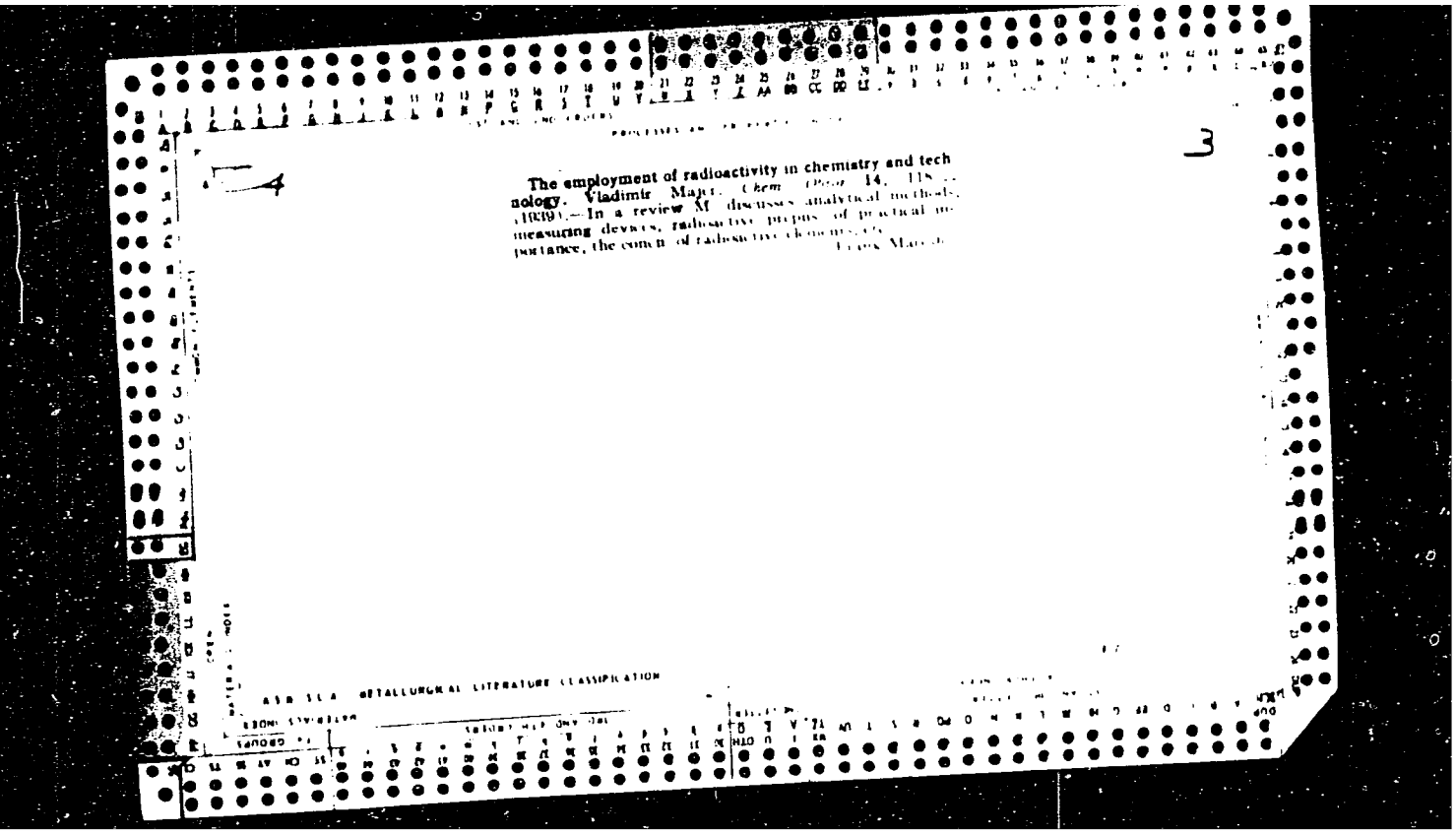


CA

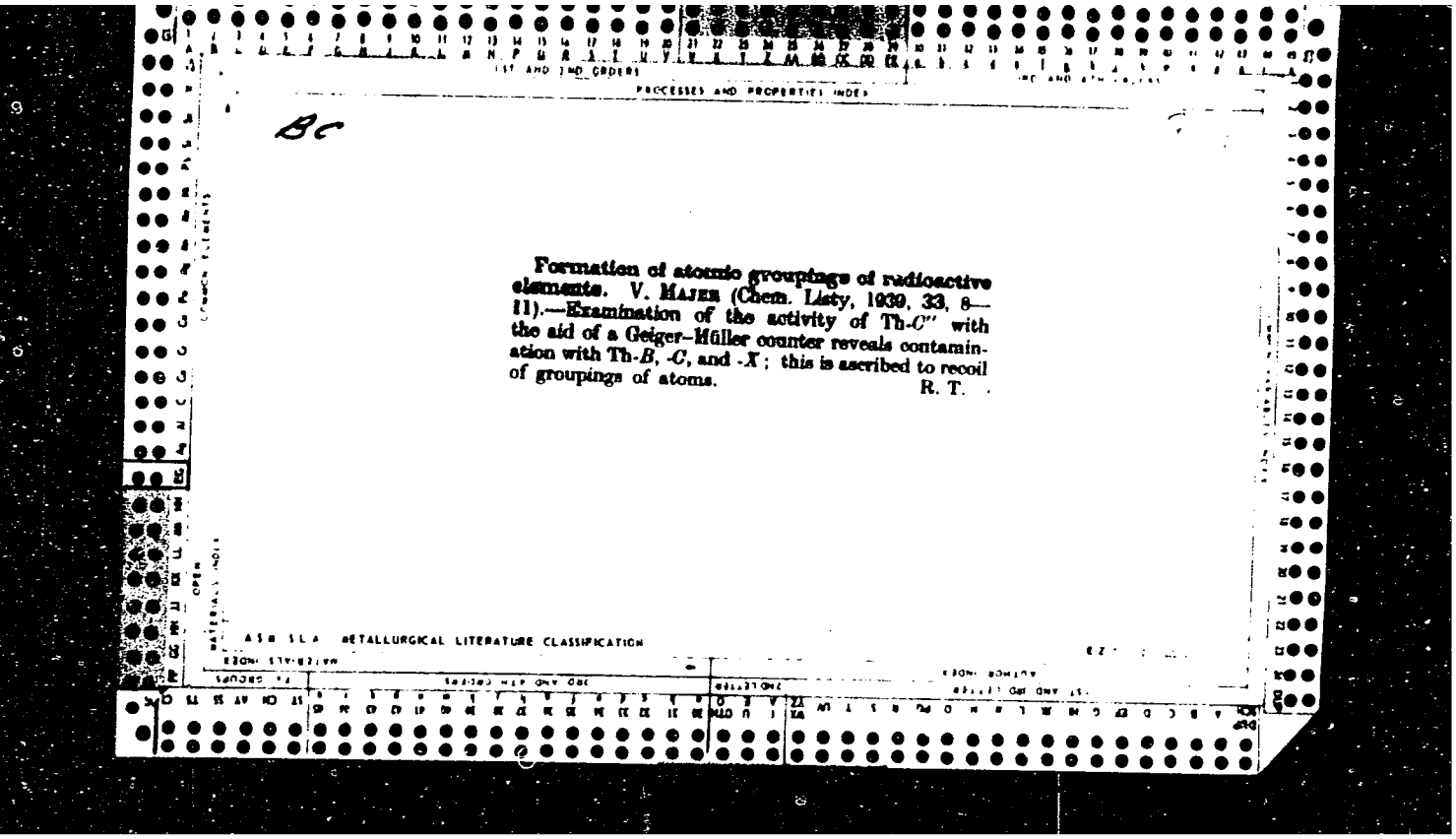
7

Can the semimicrochemical Winkler method have any significance for technical analyses? Vladimir Majer and Jaromir Macek *Chem Obzor* **14**, 53-5 (1939). The experience necessary in applying the semimicro Winkler method for detg Ca, Pb and sulfate make it doubtful whether the procedure is useful except where many analyses are required. Frank Marcsh

A 5 8 5 4 METALLURGICAL LITERATURE CLASSIFICATION



The employment of radioactivity in chemistry and technology. Vladimir Majer. *Chem* (Prue) 14, 118 ... (1939).—In a review of discusses analytical methods, measuring devices, radioactive preps of practical importance, the concn of radioactive elements ... Franz Marc...



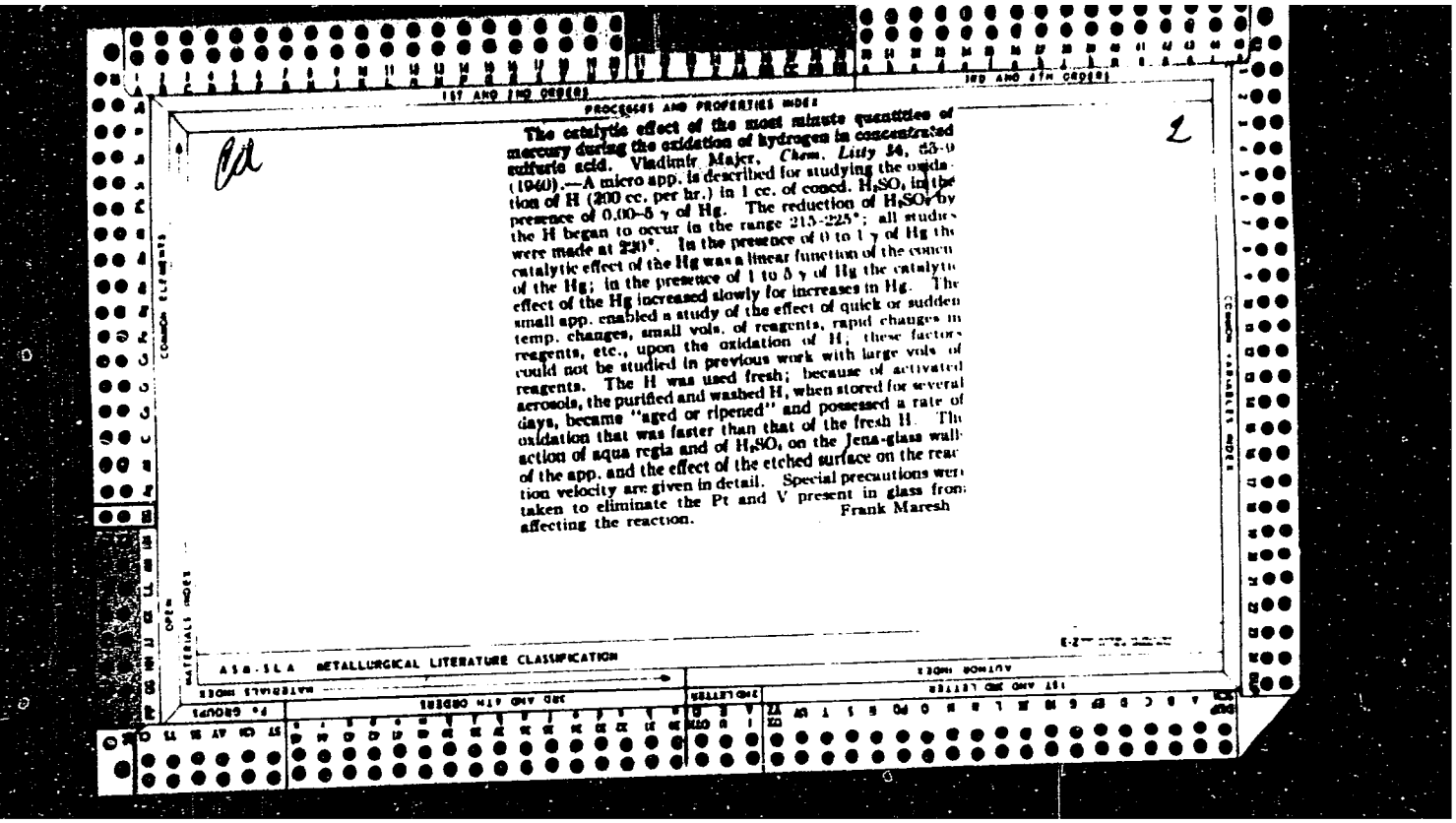
PROCESSES AND PROPERTIES INDEX

Bc

Formation of atomic groupings of radioactive elements. V. Mayer (Chem. Listy, 1939, 33, 6—11).—Examination of the activity of Th-*C''* with the aid of a Geiger–Müller counter reveals contamination with Th-*B*, -*C*, and -*X*; this is ascribed to recoil of groupings of atoms. R. T.

METALLURGICAL LITERATURE CLASSIFICATION

Preparation and concentration of radioactive gold Vladimir Majer. *Chem. Listy* **33**, 130-2(1939). (1) About 50 g. of $Na_3[Au(S_2O_3)_2]$ was bombarded by thermal neutrons from Rn + Be in a large paraffin block for 48 hrs. The powd. residue was shaken for 4 hrs. with 5 g. of metallic Hg. The ratio of the active to the inactive isotope was 9 times greater in the Hg than in the Au residue. The greatest activity was found in the most finely dispersed Hg, which is in a position to amalgamate the largest no. of liberated atoms of radioactive Au. (2) One cc. of 0.05 *M* $AuCl_3$ treated with a few drops of oxalic acid and heated until it ceased to be optically clear was added to 20 cc. of 0.05 or 0.5 *M* $AuCl_3$ contg. enough NaOH to be a 5 *M* soln. After the soln. became red, it was exposed to thermal neutrons from Rn + Be at an av. intensity of 400 millicuries for 48 hrs. During the period of bombardment some of the Au coagulated from an ionic dispersion into a colloidal dispersion and finally into a suspension which pptd. and carried with it the atoms of radioactive Au liberated from the $AuCl_3$, the latter substance contg. a large no. of Au atoms which can be activated. The Au of the colloidal ppt. contained a 10-fold concn. of the radioactive Au. Frank Maresh

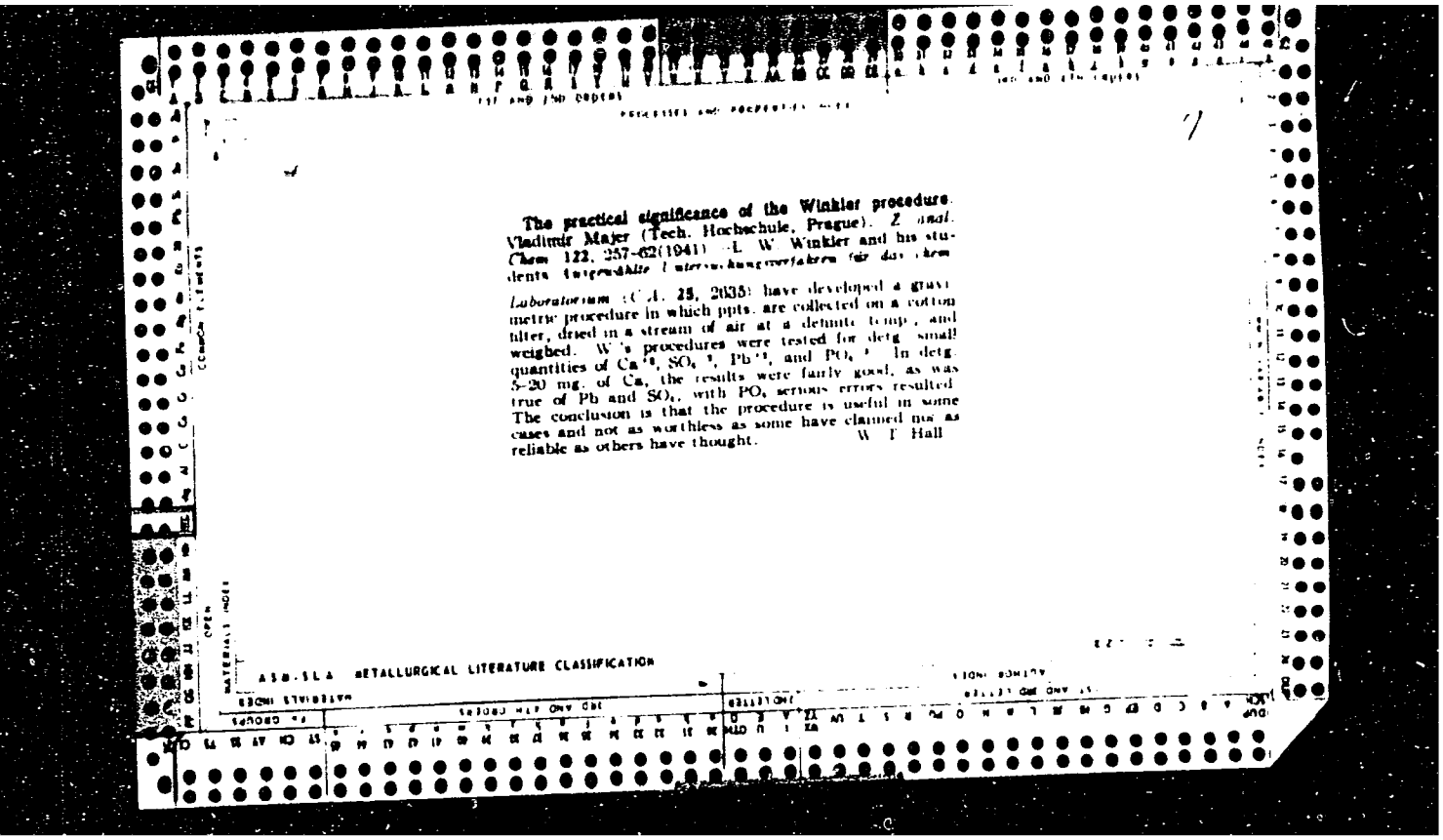


PROCESSES AND PROPERTIES INDEX

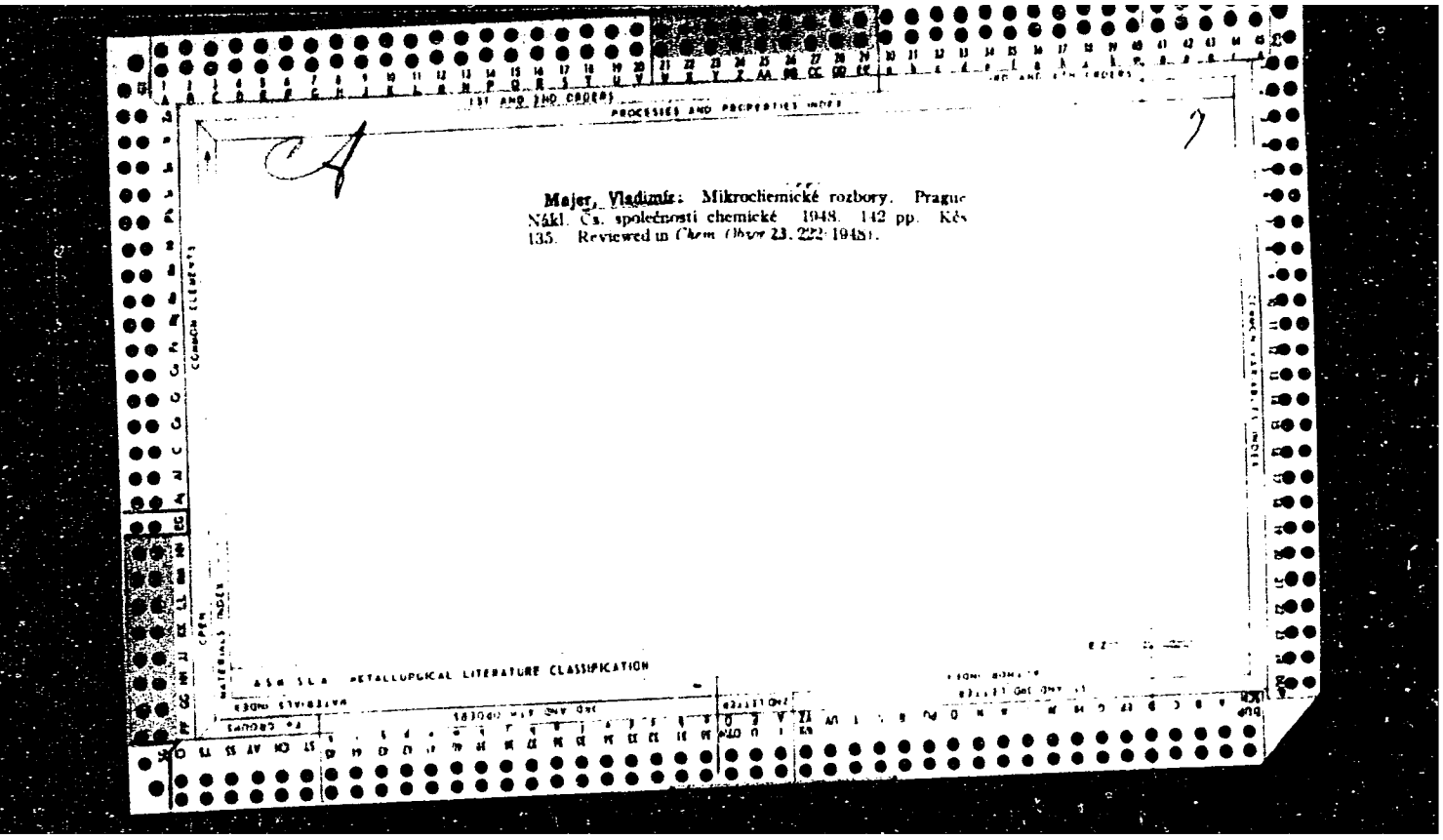
The catalytic effect of the most minute quantities of mercury during the oxidation of hydrogen in concentrated sulfuric acid. Vladimir Majer. *Chem. Listy* 34, 55-9 (1940).—A micro app. is described for studying the oxidation of H (200 cc. per hr.) in 1 cc. of concd. H_2SO_4 in the presence of 0.00–5 γ of Hg. The reduction of H_2SO_4 by the H began to occur in the range 215–225°; all studies were made at 220°. In the presence of 0 to 1 γ of Hg the catalytic effect of the Hg was a linear function of the concn. of the Hg; in the presence of 1 to 5 γ of Hg the catalytic effect of the Hg increased slowly for increases in Hg. The small app. enabled a study of the effect of quick or sudden temp. changes, small vols. of reagents, rapid changes in reagents, etc., upon the oxidation of H; these factors could not be studied in previous work with large vols. of reagents. The H was used fresh; because of activated aerosols, the purified and washed H, when stored for several days, became "aged or ripened" and possessed a rate of oxidation that was faster than that of the fresh H. The action of aqua regia and of H_2SO_4 on the Jena-glass wall of the app. and the effect of the etched surface on the reaction velocity are given in detail. Special precautions were taken to eliminate the Pt and V present in glass from affecting the reaction.

Frank Maresh

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



The practical significance of the Winkler procedure. Vladimír Majer (Tech. Hochschule, Prague). *Z. anal. Chem.* 122, 257–62(1941).—L. W. Winkler and his students (*Angewandte Untersuchungsverfahren für das Chem. Laboratorium*; *C.A.* 25, 2635) have developed a gravimetric procedure in which ppts. are collected on a cotton filter, dried in a stream of air at a definite temp., and weighed. W.'s procedures were tested for detg. small quantities of Ca^{++}, SO_4^{--}, Pb^{++}, and PO_4^{---}. In detg. 5–20 mg. of Ca, the results were fairly good, as was true of Pb and SO_4, with PO_4 serious errors resulted. The conclusion is that the procedure is useful in some cases and not as worthless as some have claimed nor as reliable as others have thought. W. T. Hall



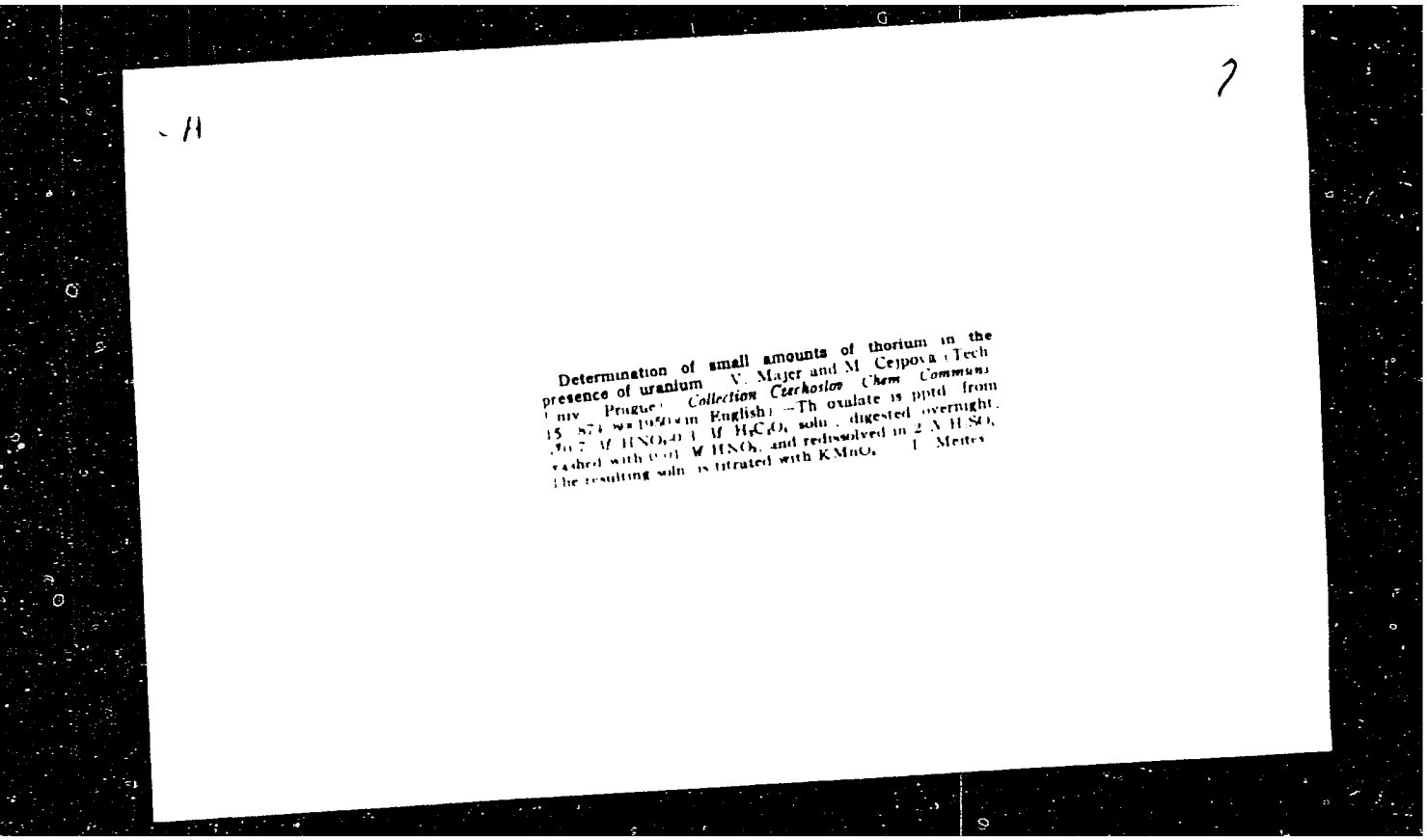
Majer, Vladimír: Mikrochemické rozbory. Prague: Nákl. Čs. společnosti chemické 1948. 142 pp. Kčs 135. Reviewed in *Chem. Obzor* 23, 222 (1948).

CA

24

Explosions in laboratories produced by chloric acid Vilém Majer (Chemie (Prague) 3 90-1(1918).—The recorded explosions of $HClO_3$ have been due to the formation of explosive compds. with Bi, Sb, NH_3, and org. substances. Explosions produced by Fe were due in part to the liberated H

Frank Maresh



Determination of small amounts of thorium in the presence of uranium. V. Majer and M. Cejpova (Tech. Univ., Prague). *Collection Czechoslov. Chem. Communs.* 15, 874-80 (1950) (in English).—Th oxalate is ppted. from 0.7 *M* HNO_3 with 0.1 *M* $H_2C_2O_4$ soln., digested overnight, washed with 0.01 *M* HNO_3, and redissolved in 2 *N* H_2SO_4. The resulting soln. is titrated with $KMnO_4$. I. Metrey

C A

6

Chlorination of stibnite. J. Sedláček and V. Majer (Tech. Univ., Prague). *Chem. Listy* **44**, 66-8 (1950). Crude stibnite was chlorinated at 250° to produce anhyd. $SbCl_3$. The isolation of $SbCl_3$ from S_2Cl_2 by distn. was not successful, and the yield of $SbCl_3$ was low. Chlorination of Sb_2S_3 in an aq. medium was unsuitable for the production of the anhyd. compd. The best yields (93%) were obtained by chlorination in $CHCl_3$ soln., in which $SbCl_3$ is but slightly sol.

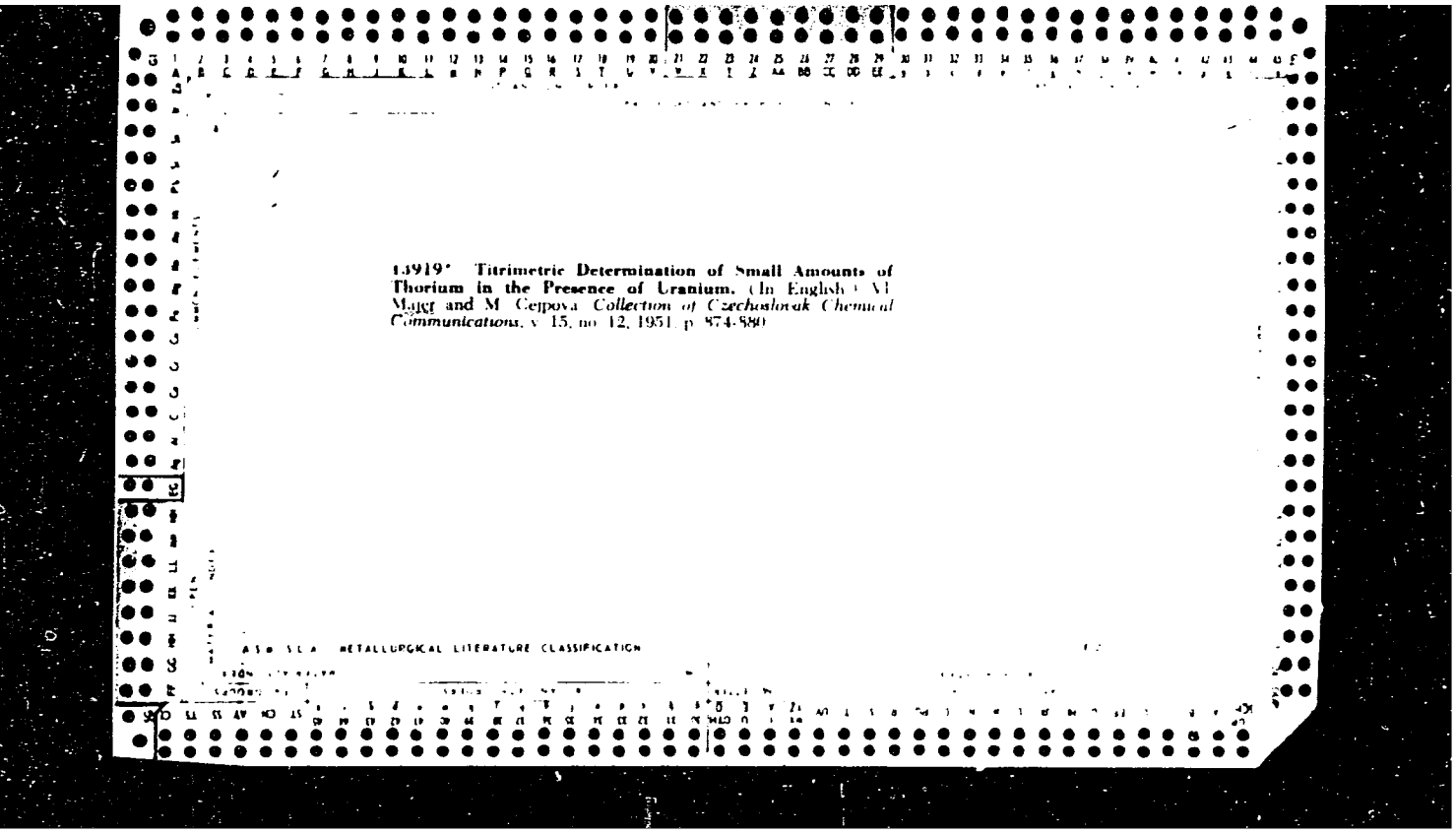
M. Hudlický

CA

7

Manganometric determination of small amounts of [illegible] V. Mayer, Tech. Univ. Prague, *Chem. Listy* [illegible] To 5 ml. soln. contg. 0.5–10 mg. ThO_2 add 0.5 ml. 2 *N* HNO_3, heat on a steam bath, and add dropwise 0.5 ml. of a satd. soln. of $C_2H_2O_4$. Continue the heating 1–2 hrs., allow to stand a few hrs. at room temp., filter, wash the ppt. 4 times with 15-ml. portions of water contg. 0.5 ml. 2 *N* HNO_3 per 100 ml. Dissolve the ThC_2O_4 in 5 ml. 2 *N* H_2SO_4, and titrate with 0.01 *N* $KMnO_4$ at 80°.

M. Hudlický



13919* **Titrimetric Determination of Small Amounts of Thorium in the Presence of Uranium.** (In English) VI Majer and M Cejpova. *Collection of Czechoslovak Chemical Communications*, v 15, no 12, 1951, p 874-880

A S & T I A METALLURGICAL LITERATURE CLASSIFICATION

CA

7

Identification limit in the polarographic method Vladimir Majer (Tech Univ., Prague, Czech *Chem Listy* 45, 62-4(1951). When the *polarographic method* is applied to small samples (0.005 ml.) the results may be influenced by the small surface of the reference electrode, small vol. of the sample, and compn. of the walls of the container. Abs. amts. of Cd ions may be detd. by the polarographic method. M. Hudlický

1951

~~VLADIMIR, M.~~

MAJER, Vladimir

VLADIMIR, M.

YUGO.

Garnet from the Karlovica stream, Ostrava Serbia. Vladimir Majer (Mineralog. Inst., Zagreb, Yugoslavia). Geol. Vjesnik 7, 270-2(1953-63)(Pub. 1954)(German summary).—Yellow-green garnet from limestone near the contact with andesite contained SiO_2 34.91, Al_2O_3 0.69, Fe_2O_3 30.40, MgO 0.58, CaO 33.20, H_2O 0.19, sum 99.97%. Sp. gr. is 3.712.

Michael Fleischer

MAJER, V.

Czechoslavakia CA: [illegible]

Polarograficke rozbory.

Prague: Tech.-vedeckeho vydavatelstvi. 1953. 196 pp. Kcs. [illegible].

Reviewed in Chem. Listy [illegible], 2.2-2 (19[illegible]).

24(2,4) PHASE I BOOK EXPLOITATION CZECH/2433

International Polarographic Congress. 1st, Prague, 1951

Sborník I. Mezinárodního polarografického sjezdu. Díl 3: Hlavní referaty prednesene na sjezdu. Proceedings...Vol 3: Reviews Read at the Congress. Praha, Přírodovědecke vyd-ví [1952] 774 p. 2,000 copies printed.

Resp. Ed.: Jiří Koryta, Doctor; Chief Ed, of Publishing House: Milan Skalník, Doctor; Tech. Ed.: Oldřich Dunka.

PURPOSE: The book is intended for chemists, chemical engineers, and physicists.

COVERAGE: The book is a collection of reviews and original papers read at the International Polarographic Congress held in Prague in 1951. Uses of polarography in organic and inorganic analysis, biochemistry, medicine, and industrial chemistry are discussed. In the section, Reviews Read at the Congress, Russian and either German or English translations of each review are presented. In the section, Original Papers Read at the Congress, only those translations in Russian, German, and English which

Card 1/14

have not been published in Volume I are presented. The following scientists participated in the opening of the Congress: Professor Wiltor Kemula, Dean of the Faculty of Sciences, Warsaw; Doctor Jaromir Dolansky, Minister of Planning; Professor Jaroslav Herovsky, Chairmen of the Congress; and Professor Jaroslav Fukatko, Chairman of the Center for Scientific Research and Technical Development. References follow each paper.

TABLE OF CONTENTS:

REVIEWS READ AT THE CONGRESS

ORIGINAL PAPERS READ AT THE CONGRESS

Proceedings (Cont.) CZECH/2433

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Proceedings (Cont.)

Proceedings (Cont.) CZECH/2433

AVAILABLE: Library of Congress

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MASEE, Vladimir

Rhyolite (quartz porphyry) of the Vranica Ranke and albite-rhyolite (quartz keratophyre) from Sinjakovo in the central Bosnian ore region. Ivan Jurković and Vladimir Majer (Univ. Zagreb, Yugoslavia). *Vesnik zavoda geol. geofiz. istraž. Serbia* 11, 207-33(in German, 225-33) (1954).—Petrographic data are given with chem. analyses of 3 rocks.

Michael Fleischer

MAJER, V.; JOLE VIC, I.

Diorites of Bijela Gromila south of Travnik in the middle Bosnian mountains. p. 129.

GEOLOSKI VJESNIK. (Zavod za geoloska istrazivanja Hrvatske i Hrvatsko geolosko drustvo) Zagreb, Yugoslavia. Vol. 11, 1957 (published 1958)

Monthly list of East European Accessions (EEAI) LC, Vol 8, no. 9, Aug. 1959

Uncl.

MAJER, V.

Report on the finding of new minerals in the so-called Serpentine Zone near Beslinac, Croatia. Bul sc Jug 5 no.2:42 'Mr '60. (EEAI 9:8)

1. Geologisches und Mineralogisches Institut der Naturwissenschaftlichen Fakultat, Skopje.
(Croatia--Minerals)

JUN 25 1963

PHASE I BOOK EXPLOITATION Z/6221

Majer, Vladimír, Docent, Engineer, Doctor.

Základy jaderné chemie (Principles of Nuclear Chemistry). Prague, SNTL, 1961. 607 p. Errata slip inserted. 2500 copies printed.

Collaborators: Ladislav Drška, Engineer, Department of Nuclear Physics (FTJF) of the Technical University of Prague (ČVUT); Bohumír Chutný, Engineer, Doctor, Vladimír Kačena, Doctor of Natural Sciences, and Jaromír Malý, Engineer, all of the Institute of Nuclear Research (ÚJV), Czechoslovak Academy of Sciences (ČSAV); and Adolf Zeman, Doctor of Natural Sciences, FTJF, ČVUT.

Reviewers: Jiří Tepl[illegible], Engineer, Candidate of Sciences, ÚJV, ČSAV, and Čestmír Jech, Doctor of Natural Sciences, Candidate of Sciences, of the Institute of Physical Chemistry, ČSAV; Chief Ed. for Chemical Literature: Adolf Balada, Doctor of Natural Sciences; Resp. Ed.: Vladimír Spáčil, Engineer; Tech. Ed.: Ludvík Charvát.

Card 1/[illegible]

Z/6221

Principles of Nuclear Chemistry (Cont.)

PURPOSE: This textbook is intended for students in schools of higher education, as well as for research and industrial personnel concerned with the peaceful uses of atomic energy and radioactive isotopes.

COVERAGE: The textbook deals with the principles of nuclear chemistry. Elementary concepts of the structure of matter and atoms and of the origin and development of nuclear chemistry and radiochemistry are reviewed in the foreword. The main text is devoted to nuclear reactions, natural and artificial radioactivity, nuclear fission, and the chemistry of 1) nascent atoms, 2) interaction of nuclear radiation with matter, 3) radioactive elements and isotopes, and 4) radioactive tracers. Working methods and techniques, preparation of natural and artificial radioactive compounds and stable isotopes, preparation of tagged compounds, and methods of separation, concentration, and isolation of radioactive compounds and isotopes are described in detail. Uses of nuclear chemistry in analytical chemistry and technology, principles of nuclear chemical

Card 2/B

technology, and principles of thermonuclear processes are reviewed. The following are some of the personalities mentioned: J. Kaspar, Professor, Doctor, Corresponding Member, CSAV; J. Cabicar, Doctor, Candidate of Sciences, J. Růžička, A. Gosman, Z. Spurny, Candidate of Sciences, and M. Podest, Engineer, all of FTJF, CVUT; F. Behounek, Academician; J. Klumpar, Doctor, CSAV; and M. Majerova, Doctor, wife of the principal author of this text. There are 1076 references, Czech and non-Czech.

TABLE OF CONTENTS [Abridged]:

MAJER, Vladimir; JURKOVIC, Ivan, dr. inz.

A note on the finding of chromium spinel at Celinac, Bosnia. Geol vjes Hrv 15 no.2:337-339 '61 [publ. '63].

1. Institut fur Mineralogie, Petrologie and Erzlagerstatten, Technologische Fakultat, Zagreb, Pierotijeva b.b.
2. Clan Urednickog odbora i referent, "Geoloski vjesnik" (for Jurkovic.

MAJER, Vladimir

Albite granite in the conglomerates of the diabase-hornstone formation near Prisoje, Bosnia. Geol vjes Hrv 15 no.2:365-36[illegible] [publ. '63].

1. Zavod za mineralogiju, petrologiju i rudna lezista, Tehnoloski fakultet, Zagreb, Pierotijeva ul. b.b.

MAJER, Vl.

Sixty-fifth birthday of Academician Frantisek Benounek. Chem. listy 57 no.10:1103-1104 O '63.

MAJER, Waclaw

Short wave therapy of inflammatory uterine bleeding. Polski tygod. lek. 9 no.49:1684-1686 6 Dec 54.

1. Z oddzialu ginek. Szpitala Miejskiego nr 1 w Walbrzychu; ordyn. dr W.Majer.

(MENORRHAGIA AND METRORRHAGIA, therapy.
short wave ther. of metrorrhagia)
(DIATHERMY, in various diseases,
short wave ther. of metrorrhagia)

POLAND / Farm Animals. Honey Bee.

Abs Jour: Ref Zhur-Biol., No 9, 1958, 40554.

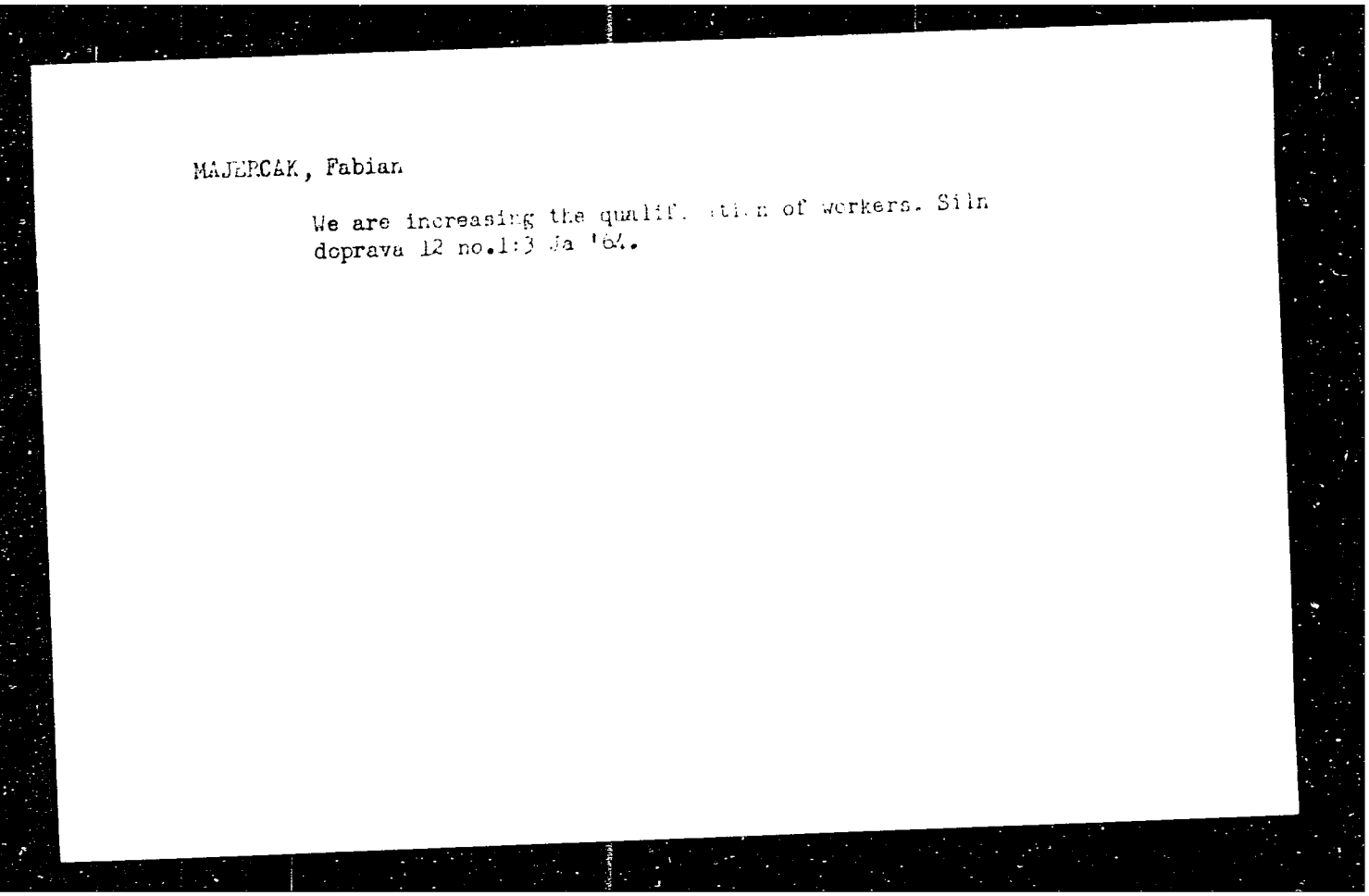
Author : Majeranowski Ludwik.
Inst : Not given.
Title : Meadows as Foraging Ground for Bees.

Orig Pub: Pszczelarstwo, 1957, 8, 235-238.

Abstract: No abstract.

Card 1/1

67



MAJERCAK, Fabian

We are increasing the qualif. ation of workers. Silnice doprava 12 no.1:3 Ja '64.

MAJERČIAK, Pavol

The addition of sunflower seed oil-cakes and of sunflower plant rejects to hog fodder. Pavol Majerčiak. *Pol'nohospodárstvo* 3, 160-71(1956)(Russian and German summaries).—Three groups of shoats were employed. Animals of the control group (Group I) received a basic ration which consisted of potatoes, barley, corn, oats, rye, dried blood, protein mixture, dry clover, and mineral additives. Animals of group II received in addn. 0.15–0.50 kg./head/day of sunflower rejects, and animals of Group III received in addn. to the basic diet similar amts. of sunflower seed oil-cake material. Exptl. feedings extended over 174 days. The av. daily increase in the wt. of shoats of Group I was 0.475 kg., of group II 0.522 kg., and of Group III 0.537 kg. To bring about a wt. gain of 1 kg. in the animals of Group III 10.6% less of fodder was required than for the animals of Group II. This was thought to be due to the greater fat or oil content of the oil-cake additives and to their favorable effect on the metabolic processes, especially on protein metabolism. The backs of the pigs of Group II accumulated 0.16% less fat than those of Group III. In all three groups more of the accumulated fat was distributed among their general tissues than was stored on their backs. The total slaughter-productivity of Group III exceeded that of Group II by 2.9%. M. recommends that from the start the feeding rations of young pigs be supplemented sufficiently with suitable oils and fats. Neither of the additives used as supplements to the basic ration in the exptl. feedings produced any unfavorable effects on either the taste or flavor of the resulting pork. B. S. Levin

CZECHOSLOVAKIA / Farm Animals. Swine Q-4

Abs Jour: Ref Zhur-Biol., No 3, 1958, 12137

Author : Landau Ladislav, Majerciak Pavol
Inst :
Title : The Effect of the Regular "Fast" of Short Duration upon the Increase in Weight and Utilization of Feeds in Swine during Their Fattening (Vliyaniye regulyarnogo kratkovremennogo "posta" na prives i ispol'zovaniye kormov u sviney vo vremya otkorma)

Orig Pub: Pol'nohospodarstvo, 1957, 4, No 2, 209-249

Abstract: Tests were carri[illegible]out on 3 groups of young pigs. The first group [illegible]control) was fed, on Sundays, three times, the [illegible]nd one - once, in the morning, and the third one [illegible]s not fed during the whole day. After 163 days of fattening, the following results were reached: the average live weight was 131.1,

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CZECHOSLOVAKIA / Farm Animals. Swine Q-4

Abs Jour: Ref Zhur-Biol., No 3, 1958, 12137

Abstract: 122.84 and 121.9 kg. respectively; the average daily increase in weight - 658, 608 and 602 g.; the consumption of digestible protein per 1 kg. of weight increase - 0.40, 0.40 and 0.41 kg., and that of starch units - 3.01, 2.94 and 3.05; the weight of the carcass was 83.2, 82.2 and 81.6%. Fasting on Sundays, for not more than 18 hours, with the exclusion of the day and evening feeds from the feeding schedule, is considered admissible, while fasting for 24 hours is not allowable.

Card 2/2

Q

CZECHOSLOVAKIA / Farm Animals. Swine

Abs Jour: Ref Zhur-Biol., No 5, 1958, 21487

Author : Majerciak Pavol
Inst :
Title : Let Us Make the Ways of Raising Young Pigs Approach Natural Summer Conditions (Priblizim vospitaniye porosyat k prirodnym usloviyam letnego vremeni)

Orig Pub: Nas chov, 1957, No 11, 303-305

Abstract: The first group of sows together with young pigs from the summer litter (March-August), and the 2nd group of the winter litter (September-February) were kept in hog-stal's and were not allowed to go out; the 3rd group (summer litters) and the 4th group (winter litters) were permitted to pasture and were let out onto appropriate ground in winter to root about with their snouts. The average weight of one

Card 1/2

MAYERCHIK, I. [Majerczyk, I.] (Varshava)

Separatrices of plane dynamic systems. Mat. sbor. 59 (dop.):53-66 '62. (MIRA 16:6)

(Topology)

MAJERCZYK, Joanna

"An interesting cube" by Aniela Ehrenfeucht. Reviewed by Joanna Majerczyk. Rocz wiad matem 6 no.2:287-288 '63.

MAJEREK-STARACHOWICZ, Jadwiga.

Otogenous brain abscesses. Otolar. polska 9 no.3:205-213 1955.

1. Z Kliniki Otolaryngologicznej A.M. w Krakowie. Kierownik: prof. dr. J.Miodonski. Otolar. polska 9 no.3:205-213 1955.
(BRAIN, abscess,
otogenous)
(ABSCESS,
brain, otogenous)
(EAR, diseases,
causing brain abscess)

FIALA, Jaroslav, MUDr. [illegible]; Technicka spoluprace: MA[illegible], [illegible]ena

Our experience with the blood preserved with [illegible] and heparin. Vnitrni lek. [illegible]

1. Ustav ematologie a krevni transfuze v Praze [illegible] prof. MUDr. Jaroslav Hore[illegible]i, [illegible], clen koresondent [illegible] akademie [illegible].

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031410017-3"

MAJERNIK, J.

TAKAC, M.

Czechoslovakia

Internal Medicine Clinic, Medical Faculty, Safarik University (Z internej kliniky Lek. fak. Safarikovej Univerzity v Kosiciach), Kosice; Director: F. POR, MD.

Brno, Vnitrni lekarstvi, No 10, Oct 62, pp 1105-1109.

"Ballistocardiogram in Complete Atrioventricular Block."

Co-authors:

MAJERNIK, J., MD, Director, Deprtment of Internal Medicine OUNZ (Z Interneho oddelenia OUNZ Humenne); ROZLOZNIK, J., Department of Internal Medicine OUNZ Humenne.

MAJERNIK, O.

MAJERNIK, O. The root-parasite fungus Roesleria pallida (Pers ex Fr.) Sacc. on the grape-vine in Slovakia. p. 558.

Vol. 11, No. 9, 1956.
BIOLOGIA
SCIENCE
Bratislava, Czechoslovakia

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

CZECHOSLOVAKIA/General Division. History. Classics. Personnel. A-2

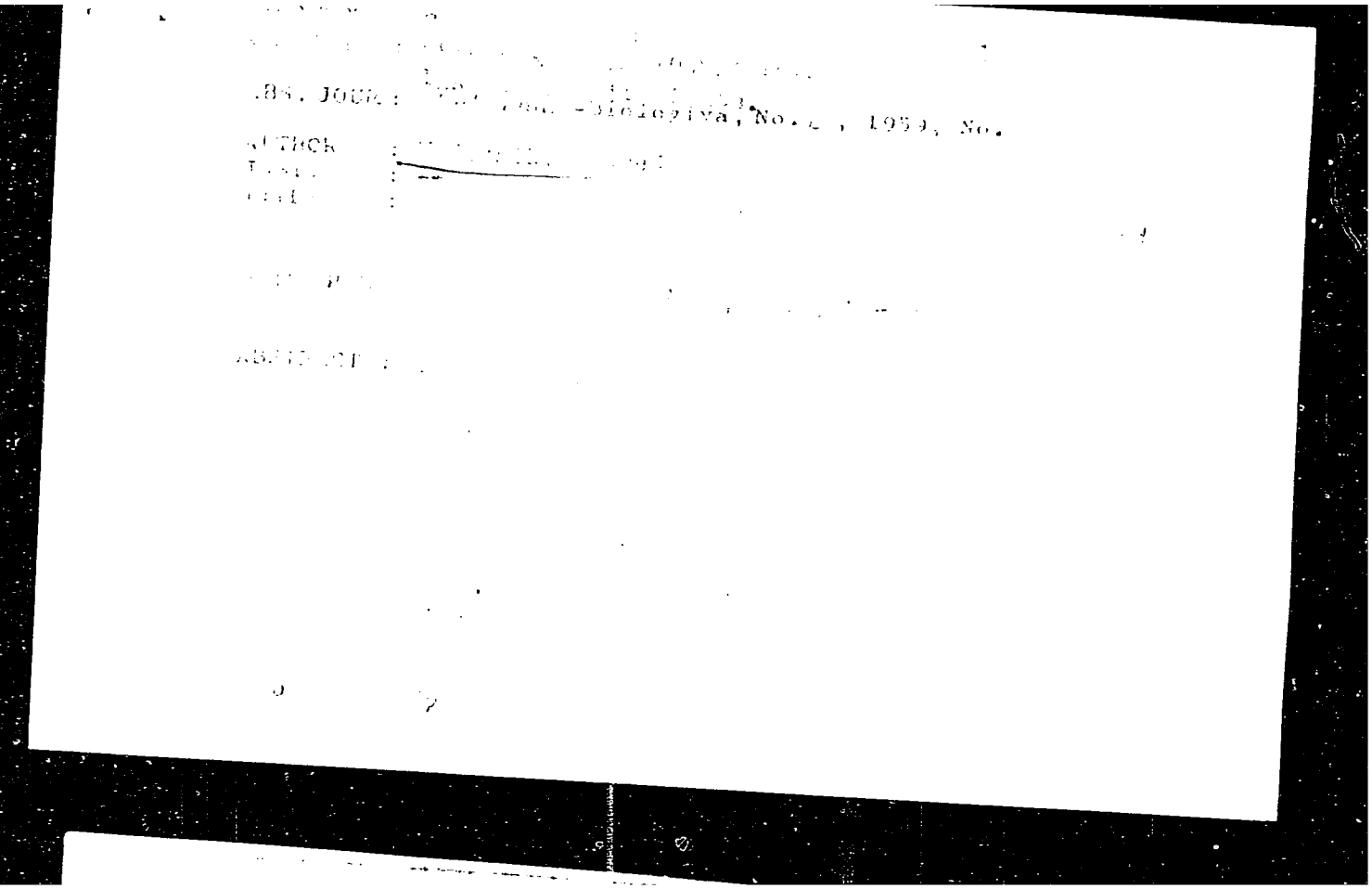
Abs Jour: Ref. Zhur. Biologiia, No 4, 1958, 14176

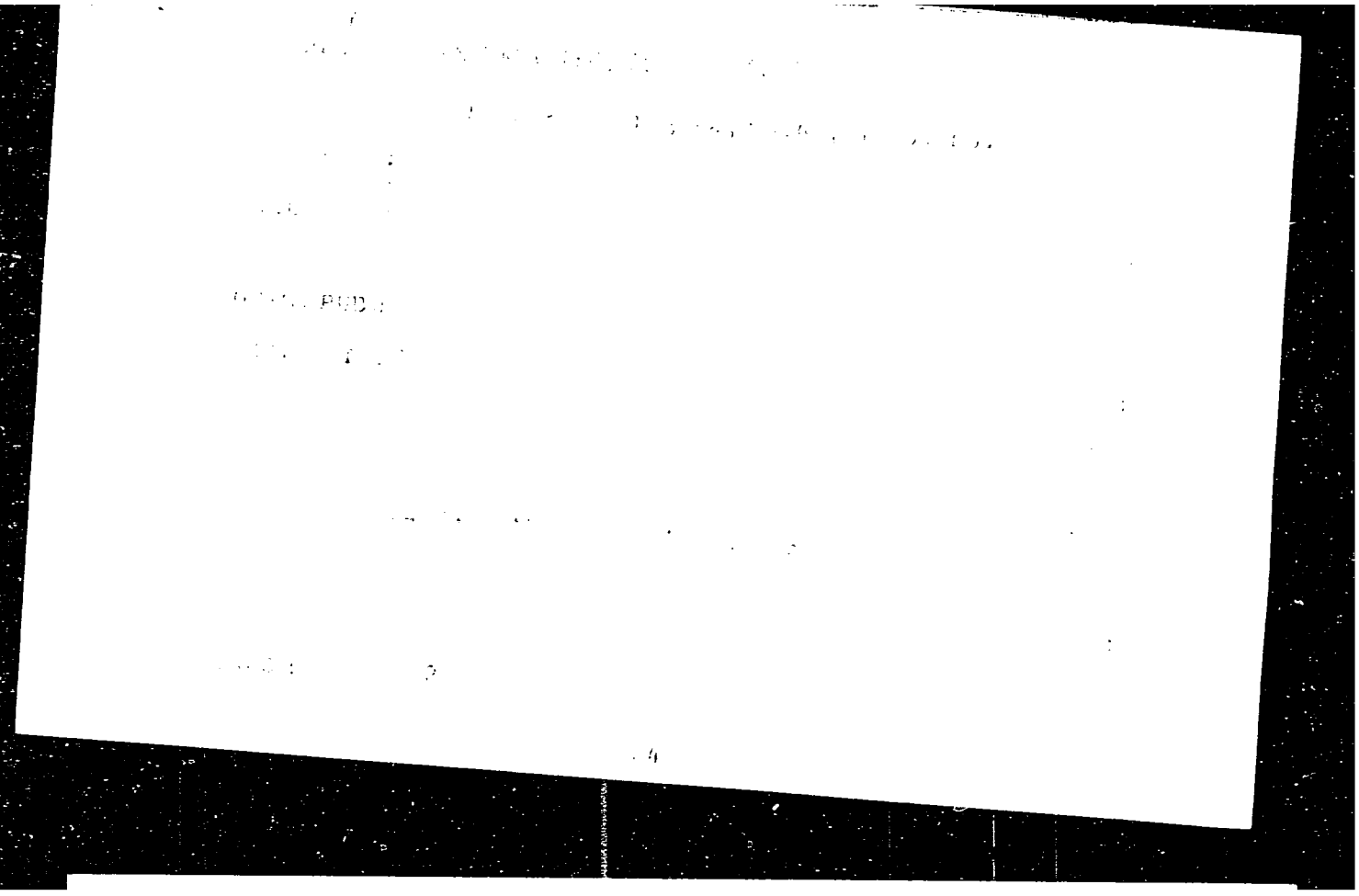
Author : Majernik O.
Inst :
Title : To the Seventieth Year of Professor of Phytopathology, Engineer E. Baudys

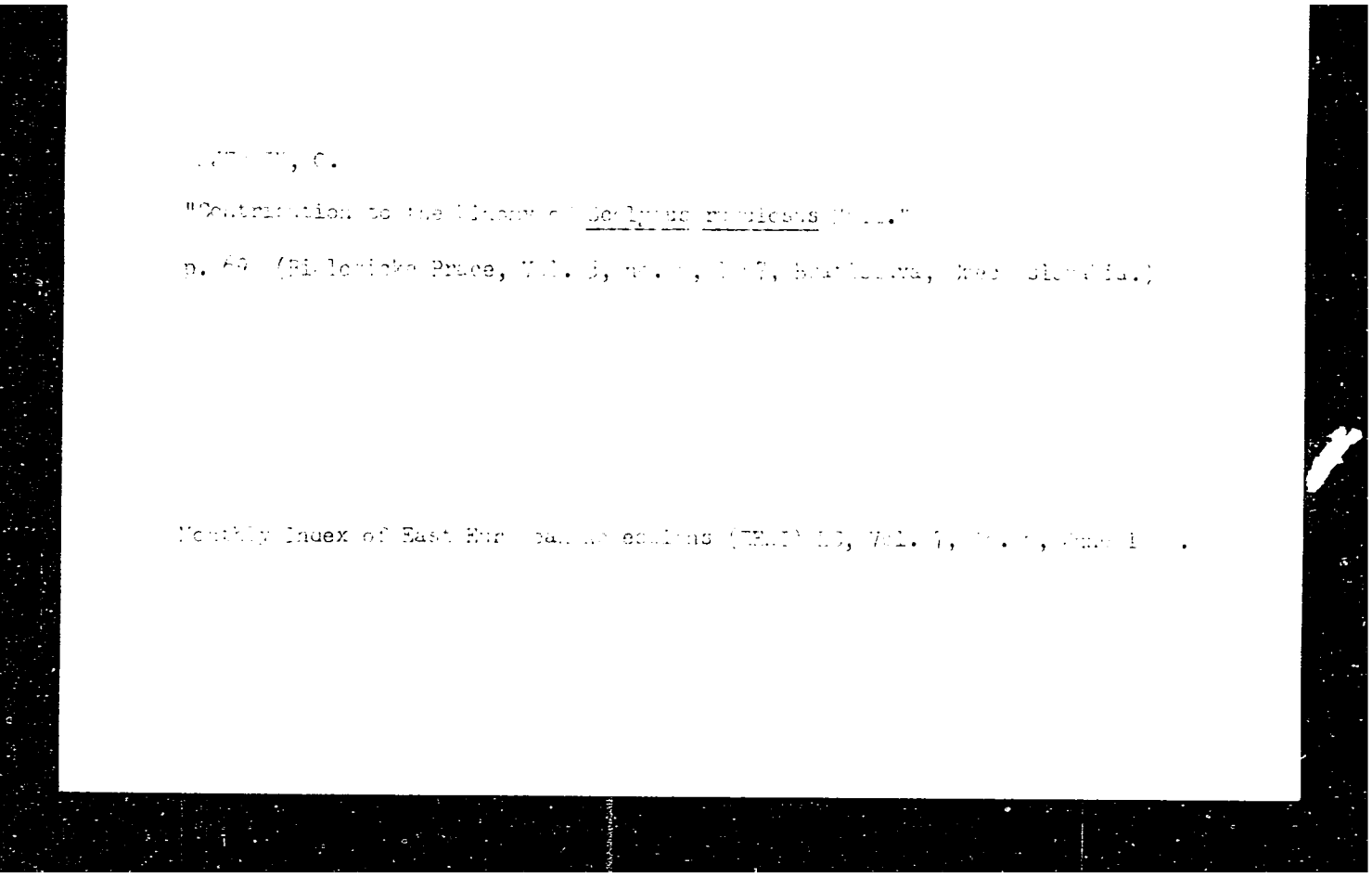
Orig Pub: Biologia, 1956, 11, No 12, 762.

Abstract: No abstract.

Card : 1/1







MAJERNIK, O.

Notes on agricultural research in Yugoslavia.

P. 387, (Biologia) Vol. 12, no. 5, 1957, Praha, Czechoslovakia

SO: Monthly Index of East European Acessions (EEAI) Vol. 6, No. 11 November 1957

CZECHOSLOVAKIA / Plant Diseases. Cultivated Plants. O

Abs Jour: Ref Zhur-Biol., No 13, 1958, 58906.

Author : Majernik, O.; Foltyn, O.
Inst : Not given.
Title : The Effect of Certain Climatic Factors on the Development of Grapevine Peronospores.

Orig Pub: Biologia, 1957, 12, No 6, 421-432.

Abstract: The study of the biology of Plasmopara viticola in the environs of Bratislava and other regions of Czechoslovakia indicated that the development of the disease in suitable temperature and humidity conditions takes place not before the third incubation period of the fungus development. The low soil humidity (less than 20%) reduces the infection on account of the reduced turgot of the leaves. The infection* rain is characterized

*during

Card 1/3

CZECHOSLOVAKIA / Plant Diseases. Cultivated Plants. C

Abs Jour: Ref Zhur-Biol., No 13, 1958, 58906.

Abstract: by the appearance of mildew spots along the leaf edges where raindrops are retained more often, whereas during the infection at dew time spots develop principally along the leaf veins. The conducted calculations indicated that, in the summer period, the infection at dew time is greater than during rainfall. Biometric investigations established that the sporangea attain their maximum length at 100% of relative atmospheric humidity, whereas a more intensive ramification of the sporangea and their greatest number are formed at the relative atmospheric humidity of 90%. The measurement of the sporangea in 1954-1955 indicated a considerably greater length than in 1897, according to the data submitted by Bubak. Since that time, the destructiveness of the disease

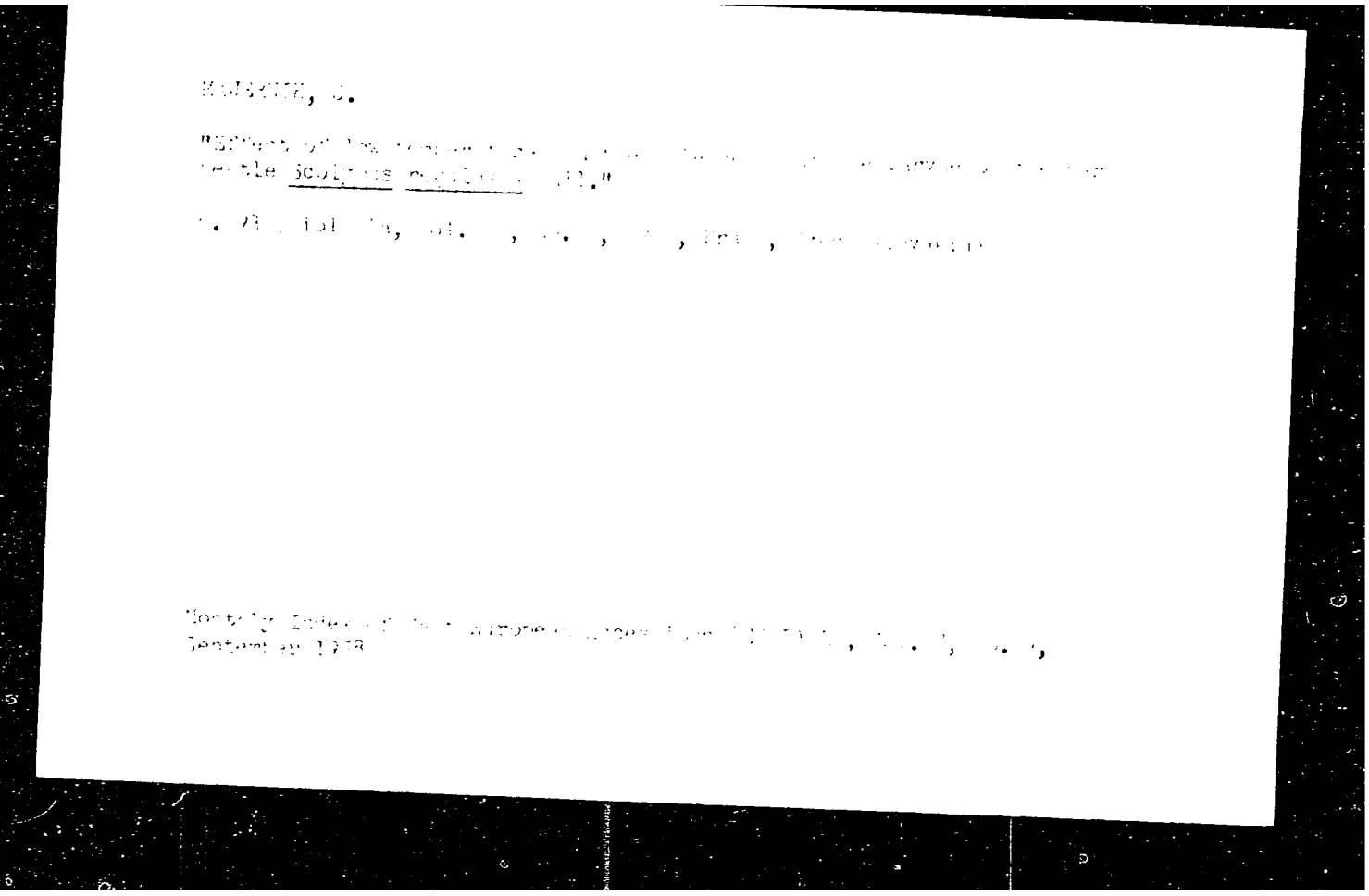
Card 2/3

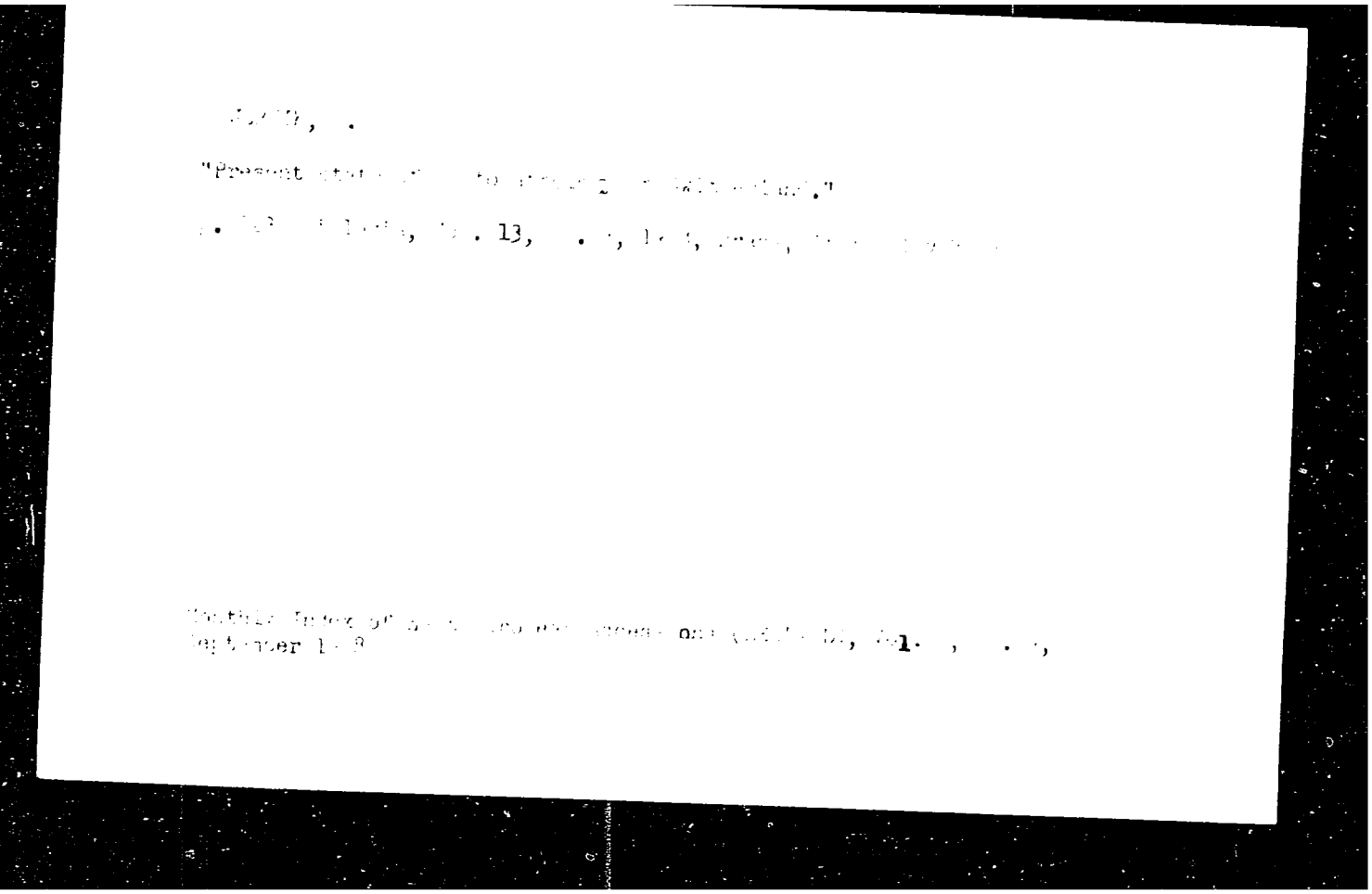
CZECHOSLOVAKIA / Plant Diseases. Cultivated Plants.

Abs Jour: Ref Zhur-Biol., No 13, 1958, 58906.

Abstract: also considerably increased. This is explained by the higher adaptability of the fungus to local conditions. The task was fulfilled in the laboratory for the protection of plants of the Slovak Academy of Sciences. -- P. M. Shterenberg.

Card 3/3





MAJTNIK, J.; STANIVA, M

"Effect of temperature on some mushrooms with regard to the premature dying of apricot trees (Prunus armeniaca L.)"

BIOLOGIA, Bratislava, Czechoslovakia, Vol. 14, no. 1, 1959

Monthly List of East European Accessions (EEAI), LC, Vol. 7, No. 7, Jul 59
Unclas

MAJERNIK, O.

Problems concerning the resistance of plants against diseases and pests in the German Democratic Republic. p. 307

BIOLOGIA. (Slovenska akademia vied) Bratislava, Czechoslovakia, Vol. 14, no. 4, 1959

Monthly List of East European Accessions (EEAI), LC, Vol. 8, no. 11, Nov. 1959
Uncl.

MAJERNIK, Ondrej; LACOK, Pavol; STANOVA, Maria

Investigation of the toxic dependence of certain agents in relation to the dieback disease of apricots (Prunus armeniaca L.). Biologia 15 no.2:32-52 '60. (EEAI 9:5)

1. Biologicky ustav Slovenskej akademie vied, Oddelenie fysiologie rastlin, Bratislava.

(APRICOT)

MAJERNIK, Ondrej

Some interesting novelties in Soviet physiology. Biologia 15 no.6: 473-474 '60. (EEAI 9:10)
(RUSSIA--PLANTS)

MAJERNIK, Ondrej

Problems concerning studies of plant immunity in the U.S.S.R. Biologia 15 no.9: 706-708 '60. (EEAI 10:4)

1. Biologicky ustav Slovenskej akademie vied, Oddelenie fyziologie rastlin, Bratislava.
(PLANTS)

MAJERNIK, Ondrej

A rare anniversary in the scientific life of Eastern Germany.
Biologia 15 no.10:795-796 '60. (EEAI 10:5)

(GERMANY, EASTERN—BOTANY)

MAJERNIK, Ondrej

Effect of artificially induced infection and injuries on the transpiration of the apricot Prunus armeniaca L. Biologia 15 no.11:801-809 (60. (EEAI 10:5)

1. Biologicky ustav Slovenskej akademie vied, Oddeleneie fysiologie rastlin. Bratislava.
(APRICOT)

MAJERNIK, Ondrej

Periodicity of the growth of the apricot tree in relation to its premature dying. Biologia 16 no.2:110-121 '61. (EEAI 10:8)

1. Biologicky ustav Slovenskej akademie vied, Oddelenie fysiologie rastlin, Bratislava.
(APRICOT) (GROWTH(PLANTS))

MAJERNIK, Ondrej

In commemoration of the 75th birthday of professor Edvard Baudys.
Biologia 16 no.5:388-389 '61.

(BAUDYS, EDVARD) (BOTANY)

MAJERNIK, Ondrej, inz., C.Sc.; NIZNANSKY, Augustin, prom. mat.

Problem of metabolism in an injured apricot. Biologia 16 no.6:445-458 '61.

(Apricot)

MAJERNIK, Ondrej

Problems of scientific research of plant physiology in Austria.
Biologia 16 no.9:704-705 '61.

(Botany)

MAJERNIK, Ondrej

A new trend in physiological research in Italy. Biologia 17 no.3: 234-236 '62.

(PHYSIOLOGY)

CZECHOSLOVAKIA

Ondrej MAJERNIK and Friedrich [illegible], Department of Plant Physiology, Biological Institute of the Slovak Academy of Sciences (Oddelenie fyziologie rastlin, Biologicky ustav Slovenskej akademie vied), Bratislava.

"Premature Withering and Death of Apricots with Regard to Metabolic Changes,"

Bratislava, Biologia, Vol [illegible] No 1, 19[illegible] pp [illegible]-14.

Abstract [German summary modified]: Determination of saccharose, glucose and fructose, lipids; tannic acid; malic and citric acids; and free ammonia in the region where the lesion appears and in distal parts of the branches, comparing with healthy controls at various times of year. There was a decrease in lipids and glycides, with increase in ammonia, in the primary lesion area, while glycides accumulated in distant regions. A "critical period" following the vegetative cycle would determine death of tree if defoliation came at same time. Six diagrams; [illegible] Czech, [illegible] Soviet, [illegible] Western-language references. [illegible]

CZECHOSLOVAKIA

MAJERNIK, Onrej, and JANITOR, Anton; Department of Plant Pathophysiology, Institute of Botany of the Slovak Academy of Sciences, Czechoslovak Academy of Sciences, Bratislava.

"Effect of Toxic Substances on Plant Tissues, as Determined with the Aid of Radioactive Phosphorus P^{32}."

Bratislava, Biologia, Vol 18, No 7, 1963; pp 489-497.

Abstract [Russian Article, English summary modified]: Branch sections of Prunus armeniaca L and Solanum lycopersicum dipped into 0.14 M or 0.01 M NH_4OH or 0.01 M fusaric acid with or without 10 ml. aqueous solution of P^{32}-orthophosphoric acid. Radioactivity appeared in leaves within 2 hours, especially high in the apricot branches; at the 20th hour the activity was much higher in both experimental sets than in controls; at the 48th hour the apricot branchlets were still absorbing P^{32}. Main mode of toxic action was ascribed to interference with closing of stomata. Two drawings, 5 tables; 1 Soviet, 4 Czech (whereof 2 unpublished) and 8 Western references.

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L 60306-65 EWA(b)-2/EWA(j)/EWT(:) JK

ACCESSION NR: AP5021086 CZ/0049/64/000/012/0904/0911

AUTHOR: Janitor, Anton (Yanitor, Anton)(Engineer)(Bratislava); Majernik, Ondrej (Mayernik, Ondrey)(Engineer, Candidate of sciences)(Bratislava)

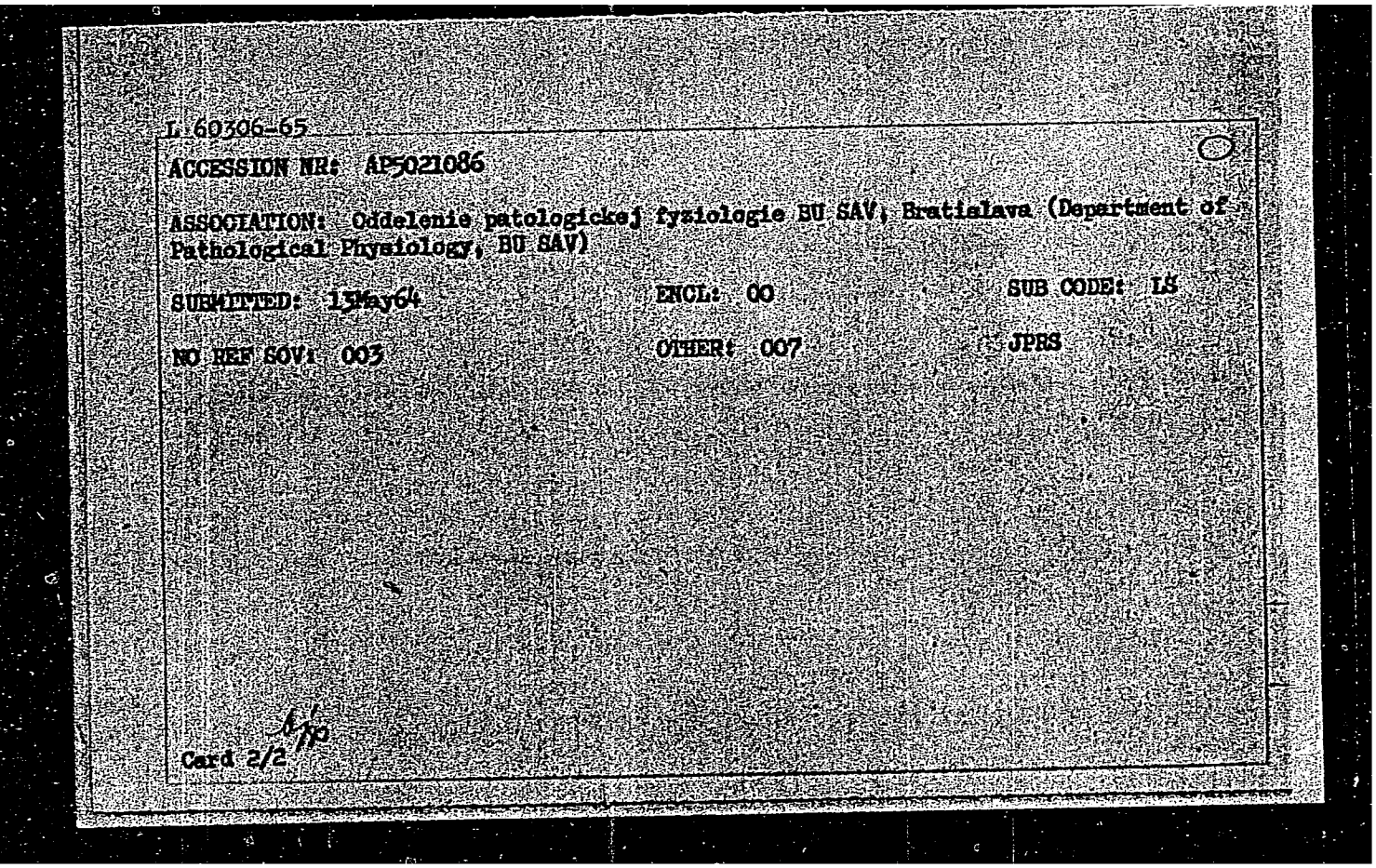
TITLE: Contribution to the adaptability of some phytopathogenic fungi

SOURCE: Biologia, no. 12, 1964, 904-911

TOPIC TAGS: fungi, plant parasite, plant growth, plant ecology

Abstract: Adaptation ability of fungi Monilia laxa and Trichoderma viride was investigated. The fungi were grown in vitro in solutions of saccharides; tannin, methylene blue were used as antagonistic agents, and the growth was evaluated planimetrically by the intensity of the mycellium growth. When enough food is available the antagonistic agents do not interfere with the growth. When insufficient source of energy in the medium was used, the inhibitive action of the antagonistic agents was very strong. It is therefore possible that inhibiting agents may be used to suppress growth of parasitic fungi, and reduce their pathogenic effect. Orig. art. has 10 figures.

Card 1/2



L 60306-65

ACCESSION NR: AP5021086

ASSOCIATION: Oddelenie patologickej fyziologie BU SAV, Bratislava (Department of Pathological Physiology, BU SAV)

SUBMITTED: 13May64 ENCL: 00 SUB CODE: LS

NO REF SOV: 003 OTHER: 007 JPRS

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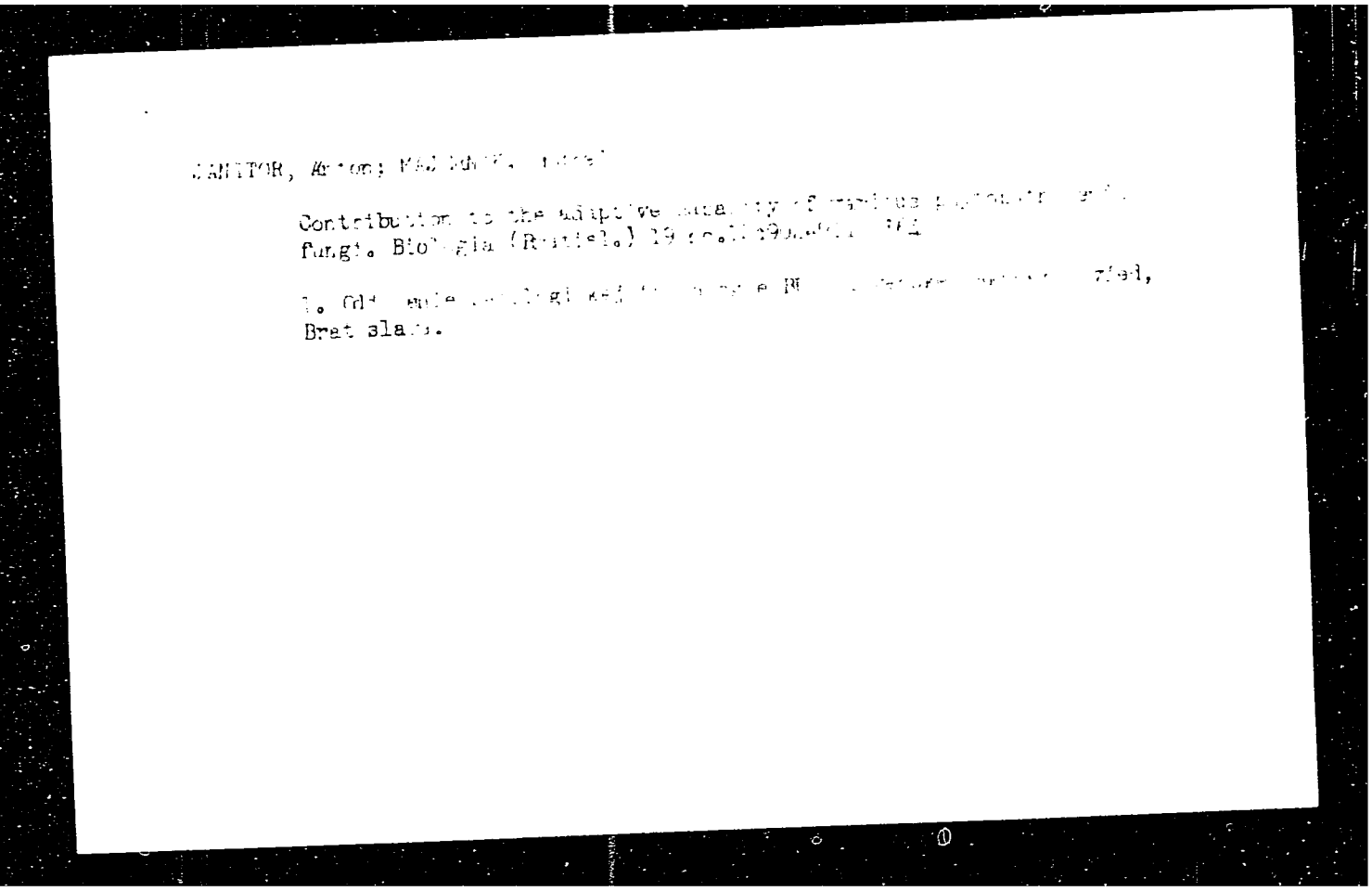

L 34538-66 T JK

ACC NR: AP6024715 SOURCE CODE: CZ/0049/66/000/002/0099/0104

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TITLE: Water loss and stomatal behavior of bean (Phaseolus vilgaris L.) infected by Uromyces appendiculatus (pers.) link

SOURCE: Biologia, no. 2, 1966, 99-104

TOPIC TAGS: fungus, plant disease, plant metabolism, plant respiration, transpiration, plant parasite

ABSTRACT: The total transpiration rate of beans infected by the fungus Uromyces appendiculatus was determined by the method of Ivanov, Silina and Tselniker (1950). The state of stomata was simultaneously investigated during the pathogenesis of the rust disease. When compared to controls, the respiration rate of the infected beans was reduced at the beginning of the infection; at later stages the leaves transpired more than the healthy ones. The break down of the photo- and hydro-reactions caused by the parasite was found by observation of stoma-

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ta. The stomatal opening of diseased leaves is limited by temperature. In diseased leaves the width of the aperture is not related to the intensity of transpiration. Orig. art. has: 5 figures. [Orig. art. in Eng.] [JPRS: 35,814]

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CZECHOSLOVAKIA

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"Indicators of Symptoms of Successful Growing or Premature Dying-Back of Apricot Trees in Slovakia."

Bratislava, Biologia, Vol 21, No 8, 1966, pp 595 - 601

Abstract [Author's English summary modified]: Adaptability of plum trees to their environment was investigated. The ability to adapt was evaluated on the basis of hydrogen-ion concentration, and other factors. When the pH of the roots of a given species is different from that of the soil substrate, such a taxon of the plum is unsuitable for the given region. The experiments indicated that apricots can be grown successfully throughout Slovakia. 2 Figures, 2 Tables, 4 Western, 8 Czech, 2 Russian, 1 East German reference. (Manuscript received 26 Oct 65).

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