"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

LUNK,F.; BLASKOVIC, D.; RAUS, J.

Relationship between virus multiplication and interferon production in mouse lungs after infection with adapted and unadapted influenza viruses. Acta virol. (Praha) [Eng.] 9 no.1: 95 Ja '65

1. Institute of Virology, Czechoslovak Academy of Sciences, Bratislava.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

BYSTRICKY, Vojtech; BLASKOVIC, Dionyz; Technicka spolupraca : RAUS, Jan; HLAVACOVA, Irena

Problem of filtrable bacteria. III. Electron microscopy of L-cycle of Hemophilus influenza Pfeiffer. Cesk. biol. 4 no.10:597-599 Nov 55.

1. Virologicky ustav CSAV Bratislava.
(MICROSCOPY, ELECTRON,
of hemophilus influenzae L-cycle.)
(HEMOPHILUS INFLUENZAE,
microscopy, electron, of L-cycle.)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUS, Jan; STYK, Bohumil, Dr.

Preservation of some virus strains through freeze-drying. Biologia 16 no.4:281-288 '61.

1. Virologicky ustav Ceskoslovenskej akademie vied, Bratislava 9, Mlynska dolina.

(VIRUSES)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

LINK, F.; RAUS, J.

Contribution to the study of the dynamics of influenza virus infection. Cesk.epidem.mikrob.imun.10 no.1:1-6 Ja '61.

1. Virologicky ustav CSAV v Bratislave.
(INFLUENZA exper)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

LINK, F.; BLASKOVIC, D.; RAUS, J.

Pathogenesis of influenza infection following inoculation of small doses of adapted virus. I. Dynamics of multiplication of an adapted influenza virus strain in mouse lungs. Acta virol.Engl.Ed.Praha 5 no.6: 373-378 N '61.

1. Institute of Virology, Czechoslovak Academy of Sciences, Bratislava.

(INFLUENZA exper)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

BLASKOVIC, D.; SOKOL, F.; KOCISKOVA, D.; technical assistance: RAUS, J.; VANGO, K.

Submits of myxoviruses. III. Antigenic properties of Newcastle disease, para-influenza 1 (Sendai) and mumps viruses of their haemagglutinins and "g-antigens". Acta virol.Engl.Ed.Praha 5 no.5:294-304 S '61.

1. Institute of Virology, Czechoslovak Academy of Sciences, Bratislava.

(NEWCASTLE DISEASE virol)
(INFLUENZA VIRUSES immunol)
(MUMPS virol)
(HEMAGGLUTINATION)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

LINK, F.; RAUS, J.; RATHOVA, V.

Studies on the effect of antiviral substances on experimental virus infections. IV. Comments on the testing of antiviral substances in laboratory mice. Acta virol. (Praha)[Eng] 7 no.5:465-471 S '63.

1. Institute of Virology, Czechoslovak Academy of Sciences, Bratislava.
(ANTIVIRAL AGENTS) (URETHANE)
(VITAMIN K) (PHARMACOLOGY) (INFLUENZA)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

LINK, F.; BLASKOVIC, D.; RAUS, J.

Studies on the effect of antiviral substances on experimental virus infections. II. Dose response relationship between concentration and antiviral effect of urethane in mice. Acta virol.Engl.Ed.Praha 5 no.4: 244-249 Jl '61.

1. Institute of Virology, Czechoslovak Academy of Sciences, Bratislava.

(URETHANE pharmacol) (INFLUENZA exper)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

BLASKOVIC, D.; MAKSIMOVIC, N.A.; STYK, B.; ALBRECHT, P.; technicka spolupraca ULDRIKOVA, R.; RAUS, J.

The course of adaptation of inhibitor resistance of influenza virus A2 for ferrets. Cesk. epidem. mikrob. imun. 10 no.3:158-165 '61.

1. Virologicky ustav CSAV, Bratislava, CSSR, a Institut infekcionnych boleznej AMN SSSR, Kijev.
(INFLUENZA VIRUSES immunol.)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

JASINSKA, St.; LINK, F.; BLASKOVIC, D.; RADA, B.; Technical assistance: RAUS, J.; HANUSOVSKA, T.

Studies on the effect of antiviral substances on experimental virus infections. III. The effects of 6-azauracil riboside and urethane on vaccinia virus infection in mice. Acta virol. (Praha)[Eng]6 no.1: 17-23 Ja '62.

1. Institute of Virology, Czechoslovak Academy of Sciences, Bratislava.

(VACCINIA virol) (URETHANE pharmacol)
(NUCLEOSIDES AND NUCLEOTIDES pharmacol)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUS, K.; GAVLIK, J.

"New glass machinery in the German Federal Republic." P. 18.

SKLAR A KERAMIK. (Ministerstvo lehkeho prumyslu). Praha, Czechoslovakia, Vol. 9, No. 2, Feb. 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 8, August 1959.
Uncla.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

NEMAD, Zdenek; HAUS, Jaroslav

Special self-carrying sliding thermocouple. Chem prum 14 no.12:661 D '64

1. Research Institute of Organic Syntheses, Pardubice-Rybitvi.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

DEMEK, J.; MARVAN, P.; PANOS, V.; RAUSER, J.

Forms of granite weathering and erosion and their dependence on the climate. Rozpravy mat CSAV 74 no.9:1-59 '64.

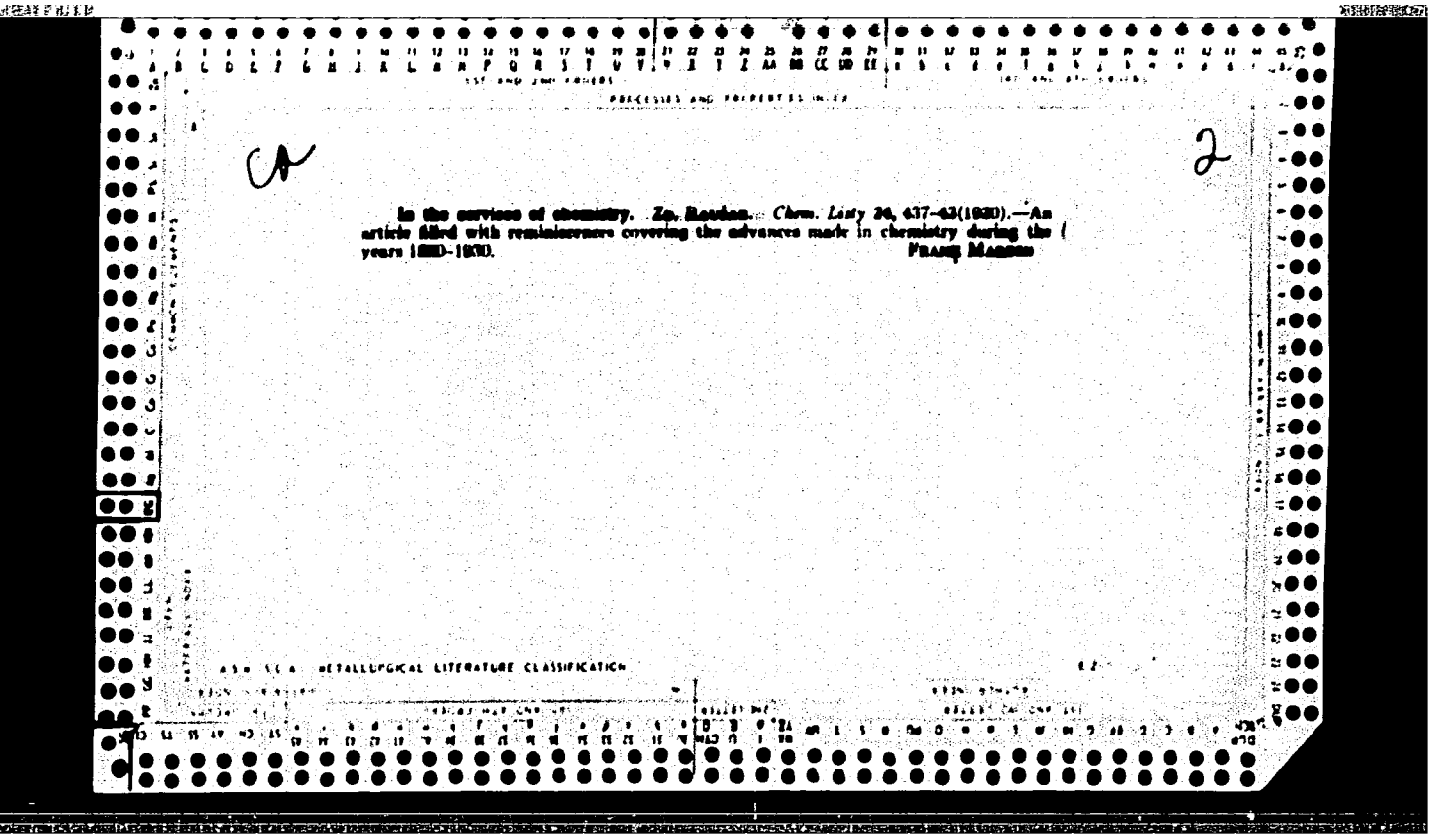
APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

PROCESSES AND PROPERTIES INDEX

CA

2

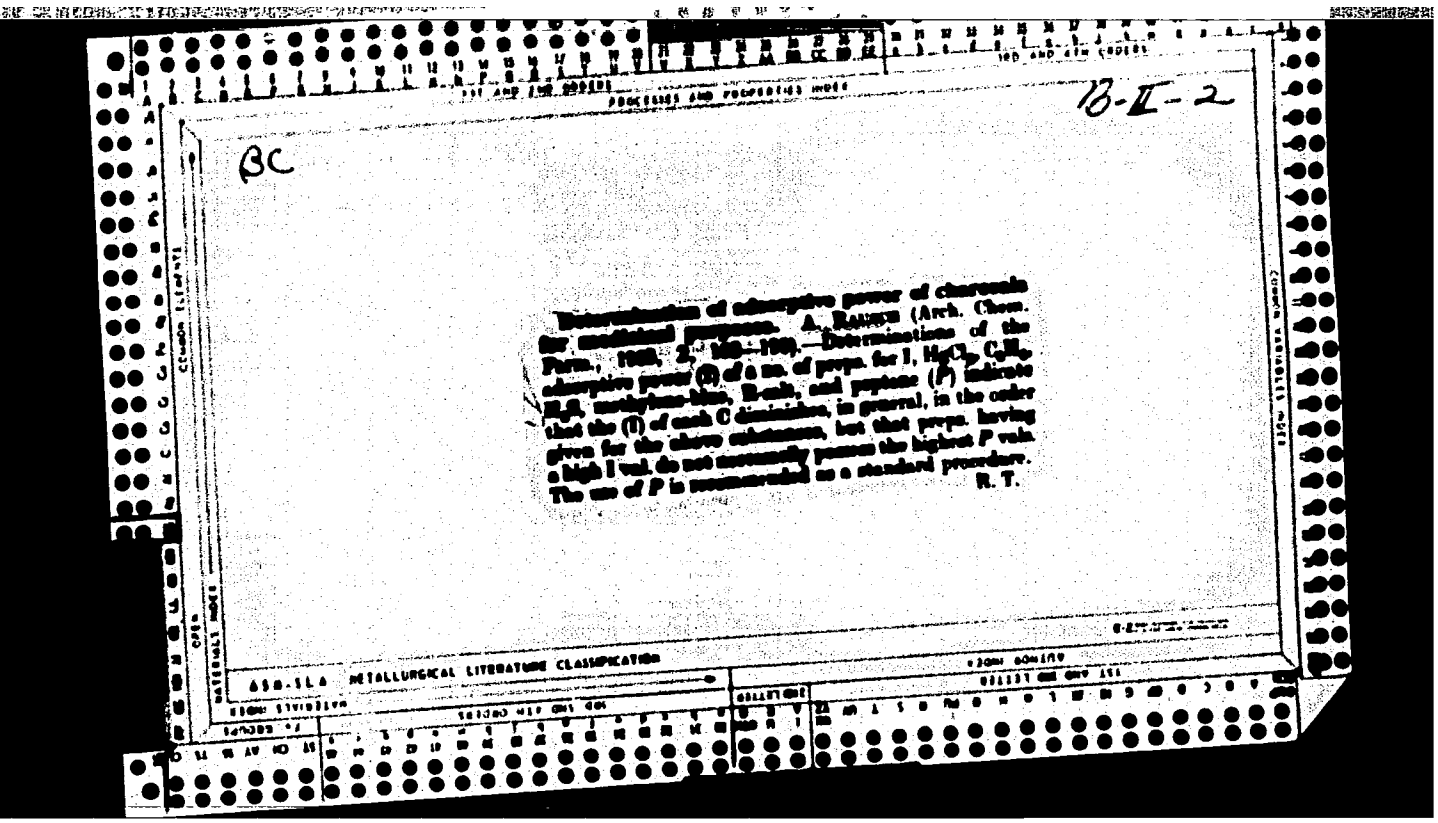


In the services of chemistry. Zn. Rauhan. Chem. Listy 24, 437-43(1930).—An article filled with reminiscences covering the advances made in chemistry during the years 1880-1930. FRANK MARSON

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

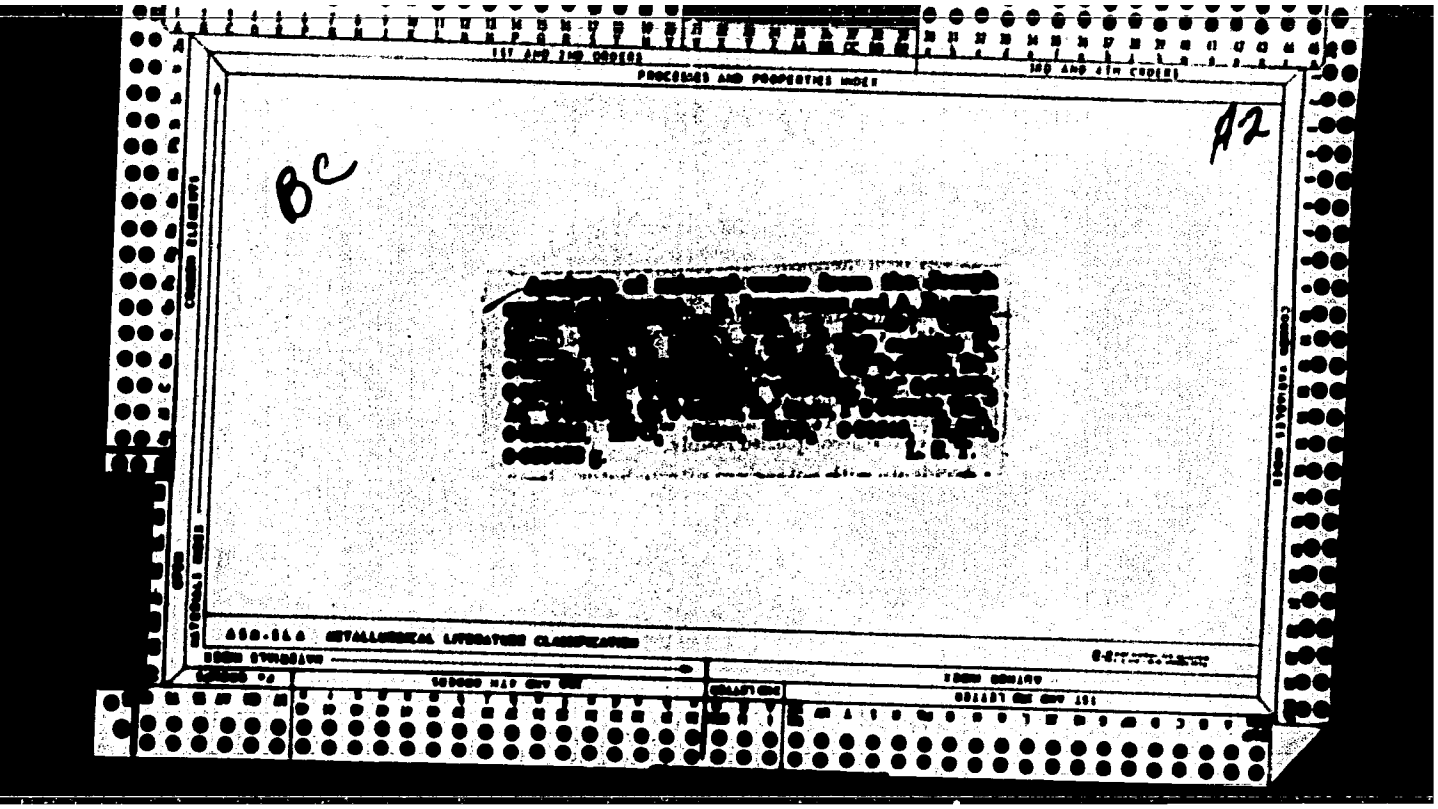
APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444



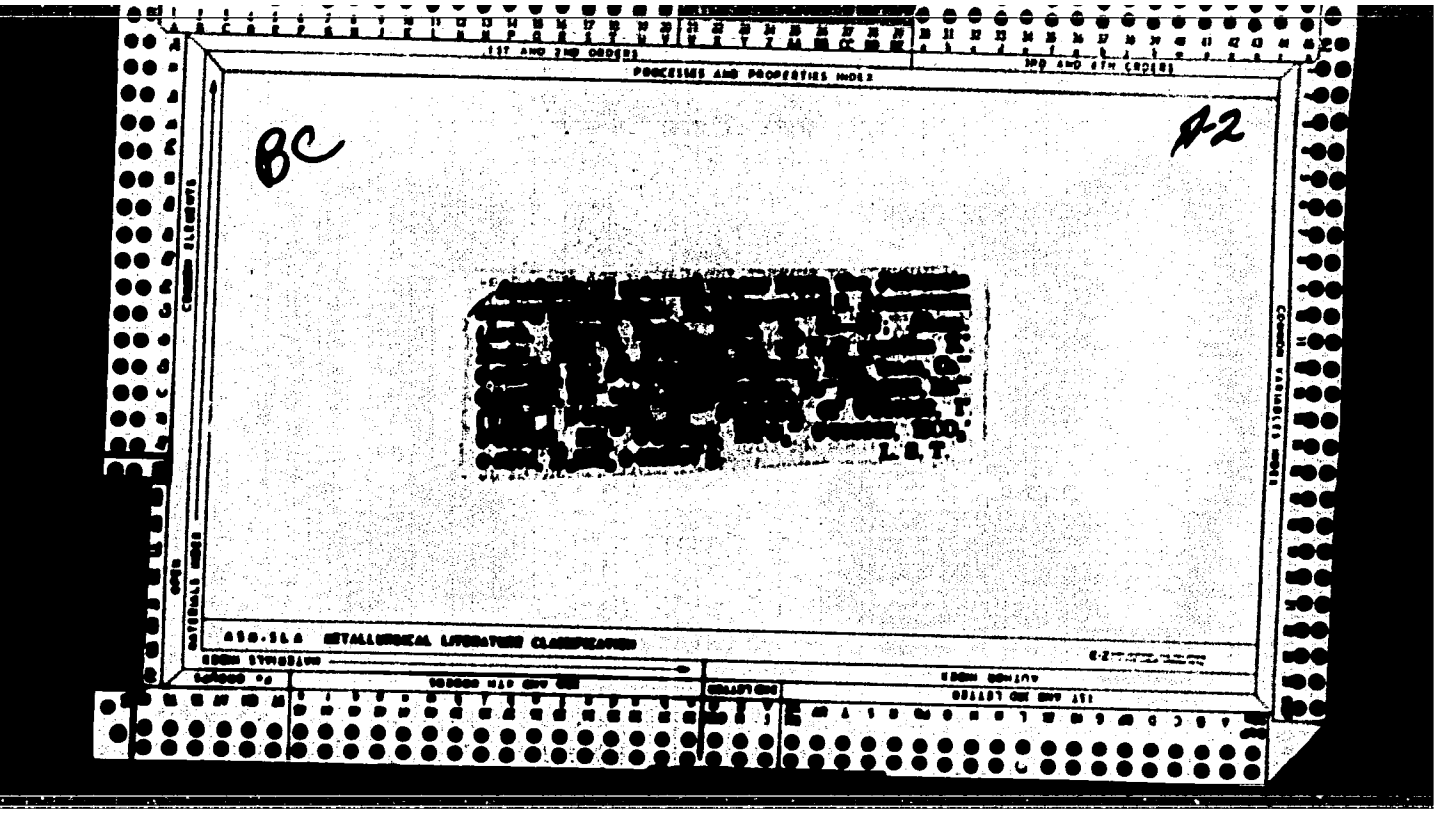

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444



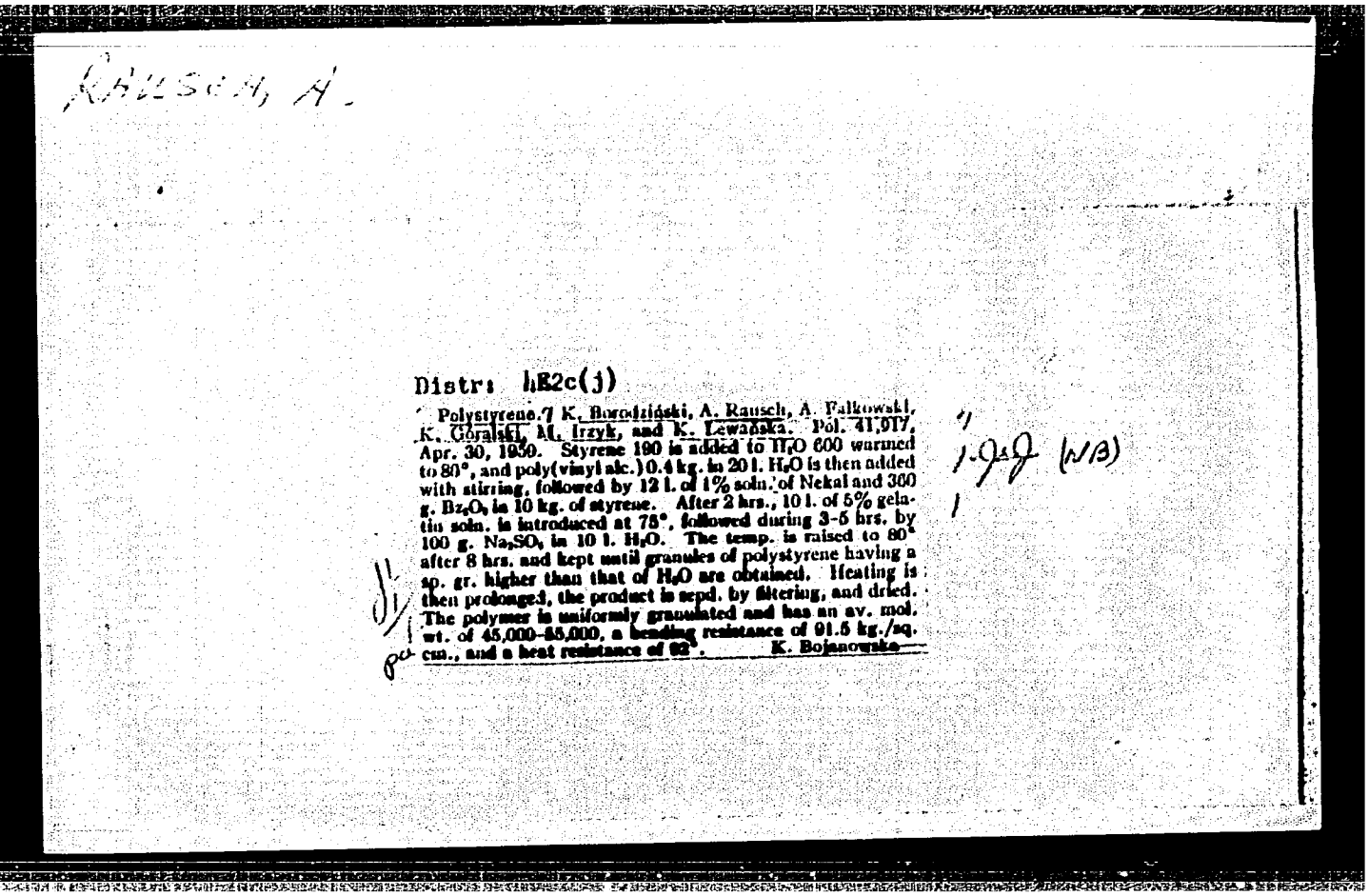

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444




APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444



Rausch, A.

Distr: HB2c(j)

Polystyrene. J. K. Borodziński, A. Rausch, A. Falkowski, K. Góralski, M. Irzyk, and K. Lewańska. Pol. 41,917, Apr. 30, 1959. Styrene 190 is added to $H_2O$ 600 warmed to 80°, and poly(vinyl alc.) 0.4 kg. in 20 l. $H_2O$ is then added with stirring, followed by 12 l. of 1% soln. of Nekal and 360 g. $Bz_2O_2$ in 10 kg. of styrene. After 2 hrs., 10 l. of 5% gelatin soln. is introduced at 75°, followed during 3-5 hrs. by 100 g. $Na_2SO_4$ in 10 l. $H_2O$. The temp. is raised to 80° after 8 hrs. and kept until granules of polystyrene having a sp. gr. higher than that of $H_2O$ are obtained. Heating is then prolonged, the product is sepd. by filtering, and dried. The polymer is uniformly granulated and has an av. mol. wt. of 45,000-55,000, a bending resistance of 91.5 kg./sq. cm., and a heat resistance of 92°. K. Bojanowska

1.9.59 (WB)

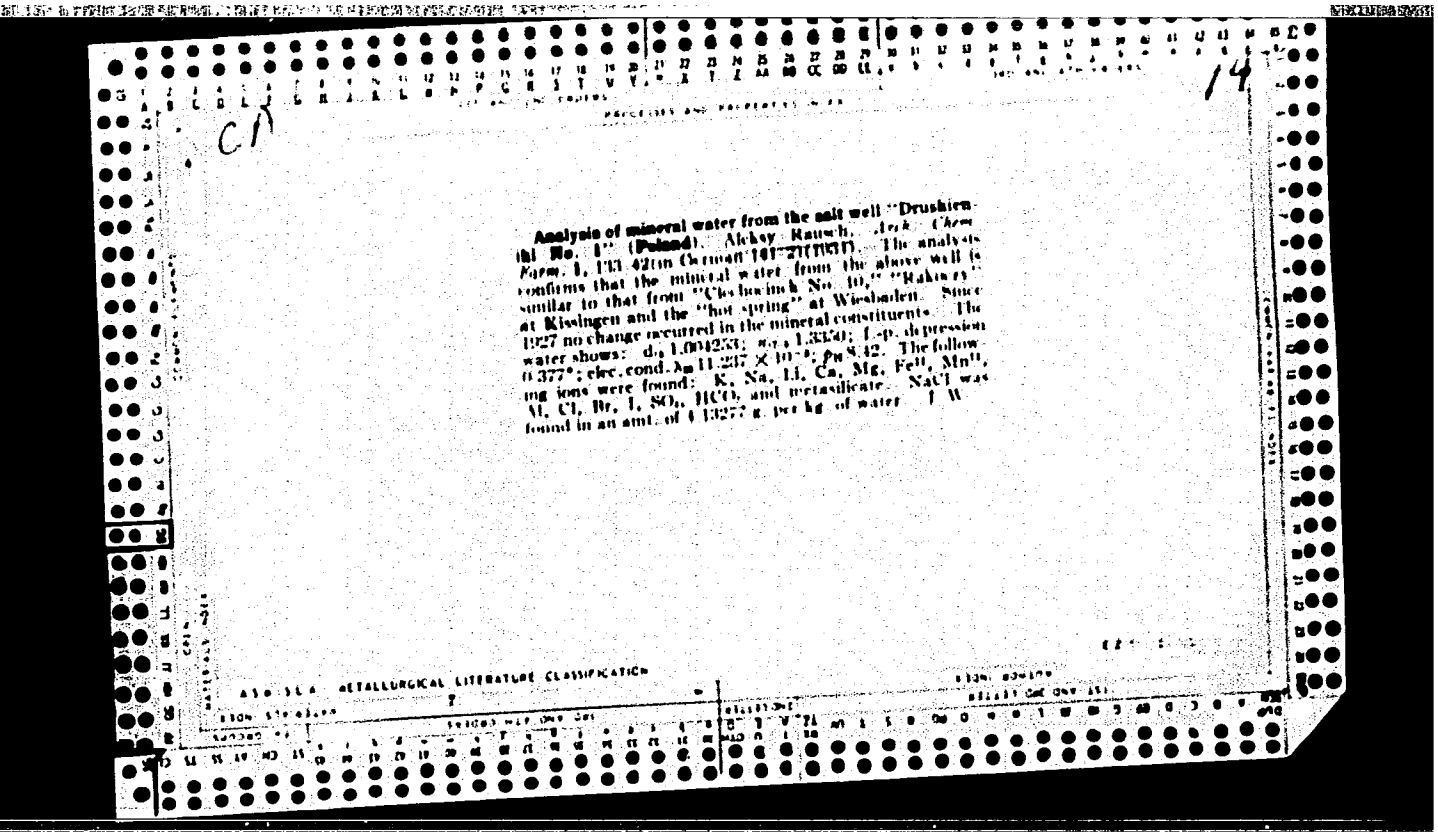
APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

14

CA

PROCESSES AND PROPERTIES IN EX

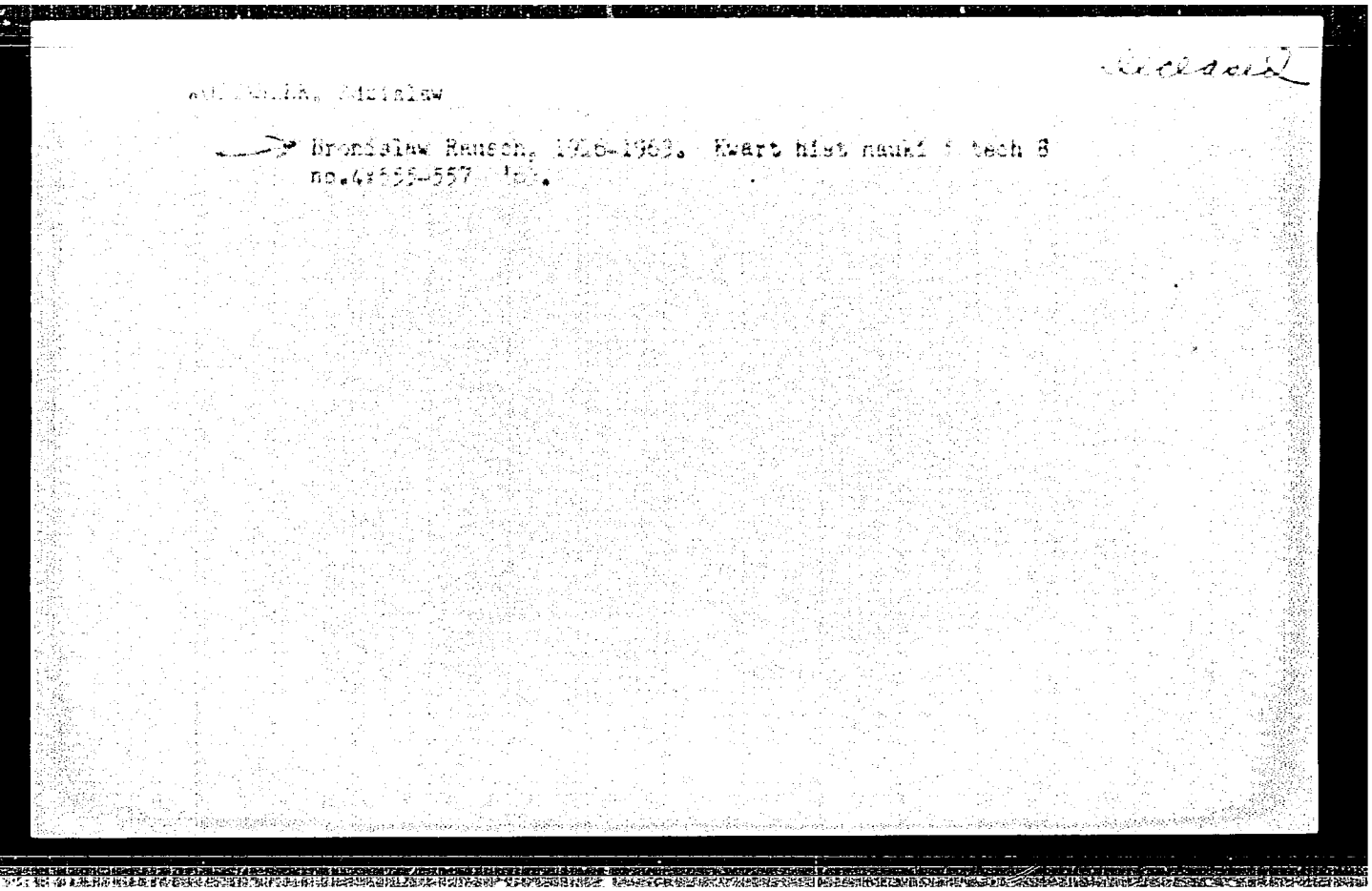


**Analysis of mineral water from the salt well "Drushienihi No. 1" (Poland).** Aleksy Rausch. *Arch. Chem. Farm.* 1, 133-42(in German) 141-2(1931). The analysis confirms that the mineral water from the above well is similar to that from "Ciechocinek No. 10," "Rakoczy" at Kissingen and the "hot spring" at Wiesbaden. Since 1927 no change occurred in the mineral constituents. The water shows: $d_{15}$ 1.004253; $n_{D}$ 1.3350; f.-p. depression 0.377°; elec. cond. $\lambda_{m}$ 11.237 × $10^{-3}$; $p_{H}$ 8.42. The following ions were found: K, Na, Li, Ca, Mg, $Fe^{II}$, $Mn^{II}$, Al, Cl, Br, I, $SO_4$, $HCO_3$ and metasilicate. NaCl was found in an amt. of 4.13277 g. per kg. of water. J. W.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444



Bronislaw Rausch, 1926-1969. Kwart hist nauk i tech 8 no.4:555-557 '69.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSCH, Bronislaw

Emiljan Franciszek Ostachowski, 1890-1962; obituary. Kwart hist nauki i tech 7 no.4:531-535 '62.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

BITTO, Attila; RAUSCH, Edvin

Head amplifier for the reception of the Banska Bystrica television station in Czechoslovakia. Radiotechnika 12 no.10:336 O '62.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

C

III

**Gypsum auxiliary products—their application and action.** F. Grap and F. Rausch. *Zement-Kalk-Gips*, 4 [5] 117–23 (1951). Gypsum auxiliary products are chemical substances which are added to the gypsum rock, the burned gypsum, the mixing water, and eventually the hardened gypsum materials (dehydrate materials) to improve the qualities of the gypsum or plaster, to accelerate or delay setting, to color, or as fillers. They are reviewed and their qualities and action are described in detail. M. Ha. 73 references

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

Amino acids. I. Nutritional research on human beings using mixtures of amino acids. Franz Rausch (Univ., Hamburg, Ger.). *Deut. Arch. klin. Med.* 193, 48-69 (1947); *Chem. Zentr.* (Russian Zone Ed.) 1948, I, 354-5; cf. *C.A.* 40, 84720.—The amino acid mixt. used was prepd. by acid hydrolysis of ox blood. It contained predominantly leucine, isoleucine, serine, and valine along with the other amino acids, although only slight amts. of cystine, tryptophan, and histidine were present. The content in amino-acid N was 12.8%, with 3.8% being sol. in water at 20°. The pH of the soln. was 5.0. The soln. had a meat-like odor and a bitter taste. Its ingestion produced a sensation of hunger as a result of a marked stimulation of the secretion of gastric HCl. This was followed by a definite sensation of satiety. There was also an increased diuresis. Administration of the amino acid mixt. in cases of deficient protein nutrition with a neg. N balance produced improvement in the N balance with this value becoming pos. with sufficiently high dosage. There was also improved utilization of the basic diet, which had previously been poorly utilized. Utilization of the amino acid mixt. was 97%. Expts. were carried out with a case of colitis ulcerosa with serious resorptive disturbances of the protein metabolism and with a case of enzymic metabolic disorders. The amino acid prepn. was preferentially resorbed even when high-grade proteins were present in the diet. There was also improved utilization of the basic diet with rapid disappearance in the symptoms, increase in the blood protein, disappearance of the edema with increased diuresis, and ultimate clinical recovery. The same effects on the N balance and the utilization of the basic diet were also observed in a case of neurosis nervosa. The question of whether the improved utilization of the basic diet was in any way related to the influence of the amino acids on enzymic processes is dis-

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

CSADA, Imrene; RAUSCH, Henrik

Determining the trace contaminants of uranium (VI)-oxide by spectrophotometric method. Kem fiz kozl MTA 13 no.1:55-60 '65.

1. Submitted December 2, 1964.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

SZEGI, J.; RAUSCH, J.; NAGY, Julia; MAGDA, Katalin

New contributions to the antagonism of morphine and N-allylnormorphine derivatives. Acta physiol. hung. 19 no.1-4:273-285 '61.

1. Pharmakologisches Institut der Medizinischen Universitat, Budapest.
(MORPHINE antag.) (NALORPHINE pharmacol.)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

SZEGI, J.; RAUSCH, J.; MAGDA, K.; NAGY, J.

Relationship between the chemical structure and pharmacological activity of the opium alkaloids. Acta physiol.hung. 16 no.4: 325-335 '59.

1. Institute of Pharmacology, Medical University, Budapest.
(OPIUM)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSCH, J.; SZEGI, J.; SZLAMKA, I.; NAGY, J.

Relation between the structure and action of morphine and its derivatives. Acta physiol. hung. 15 no.4:329-337 1959

1. Institute of Pharmacology, Medical University, Budapest.
(MORPHINE, pharmacology)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

SZEKI, J.; RAUSCH, J.; PUSZTAI, L.

New data on the absorption and elimination of cardiac glycosides.
Acta physiol. hung. 13 no.4:365-373 1958.

1. Pharmakologisches Institut der Medizinischen Universitat, Budapest.
(DIGITALIS, metabolism
absorp. & elimination studies in cats (Ger))

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

SZEGI, J.; RAISCH, J.

Effect of strophanthin on normal and cooled heart-lung preparations of cats. Acta physiol. hung. 13 no.1:79-87 1957.

1. Pharmakologisches Institut der Medizinischen Universitat, Budapest.
(HEART, artif.
heart-lung prep. of cats, eff. of strophanthin & influence of hypothermia (Ger))
(HYPOTHERMIA, eff.
on strophanthin action on heart-lung prep. of cats (Ger))
(STROPHANTHIN, eff.
on heart-lung prep. of cats, influence of hypothermia (Ger))

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSCH, J.; SZEGI, J.; MAGDA, Katalin; NAGY, Julia; BOGNAR, R.; SZABO, S.

Pharmacological study of 6-acetylmorphine methobromide. Acta physiol.hung. 18 no.1:71-83 '60.

1. Institut de Pharmacologie de l'Universite Medicale de Budapest et Institut de Chimie Organique de l'Universite des Sciences "Kossuth Lajos" de Debrecen.
(MORPHINE, related compounds)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

HAUSCHER, V., Fabr.

Czechoslovak literature on gynecology and obstetrics in 1964 appearing in publications other than Ceskoslovenska gynekologie. Cesk. gynek. 30 no.5:376-396 Je '65.

1. UFMD, Praha.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSCHER, V.Ph.Dr.

Czechoslovakian obstetrical-gynecological literature in 1963 published outside Casopis Ceskoslovenska Gynekologie. Cesk. gynek. 29 no.8:623-642 O '64.

1. UPMD, Praha.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

[illegible], N. S.

27.3400
27.2400

S/241/62/007/002/004/004
I015/I215

AUTHOR: Bagdasarov, A. A. (Deceased), Sukyasyan, G. V., Bogoyavlenskaya, M. P., Kozinets, G. I., Ilyukhin, A. V., and Ramshenbakh, M. S.

TITLE: Bone marrow transfusion for treatment of depressed hemopoiesis following irradiation

PERIODICAL: Meditsinskaya radiologiya, v. 7, no. 2, 1962, 68-71

TEXT: The necessity to continue radiation therapy in cases of malignant neoplasms forces one to look for efficient rapidly-acting hemopoiesis-stimulating means. Transfusion of homologous bone marrow was tried first on dogs and monkeys after induction of acute radiation sickness. 80-95% of cells preserved their ability for further division and that hemopoiesis subsequently improved markedly. This method was then tried on 40 patients who received 70 transfusions of homologous bone marrow. This treatment had a marked therapeutic effect in most of the patients, particularly among those with the subacute varieties of hypo- and aplastic anemia. The authors conclude, however, that the small number of cases examined is insufficient for definite evaluation of the therapeutic effect of this method.

SUBMITTED: November 20, 1961

Card 1/1

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSCHER, V.

Czechoslovakian obstetric and gynecological literature in publications other than Ceskoslovenska Gynekologia in 1960. Cesk. gyn. 26[40] no.7:541-556 Ag '61.
(OBSTETRICS bibliog) (GYNECOLOGY bibliog)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

SAFRONOVA, V.A., otv.red.; SHUROV, S.I., red.; BASHLAVINA, G.N., red.; VORONINA, A.N., red.; GUREVICH, I.V., red.; ZASLAVSKIY, I.I., red.; KOZLOV, P.M., red.; LARIN, D.A., red.; RAUSH, V.A., red.; SAMOYLOVA, I.I., red.; SLADKOVA, Ye.A., red.; STROYEV, K.F., red.; SCHASTNEV, P.N., red.; TUTOCHKINA, V.A., red.; KRUGLI, V.G., red.; DYUZHEVA, A.M., red.kart; POLYANSKAYA, L.A., red.kart

[Geographical atlas of the U.S.S.R. for the seventh grade] Geograficheskii atlas SSSR dlia 7-go klassa. Moskva, 1960. 31 col.maps. (MIRA 14:3)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye geodezii i kartografii.

(Russia--Maps)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSER, J.

A study on Czechoslovak larvae of the genus Protonemura. In German. p. 449. (PRACE, Vol. 28, No. 9, 1956, Brno, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSER, J.

Notes on Leuctra Stephens in Silesia. p. 63.
(SPISY, No. 372, 1956, Brno, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSER, J.

CONTRIB. : [illegible]
CATEGORY : General and Specialized Zoology. Insects. Systematics and Faunistics
ABS. JOUR. : RZhBiol., No. 22 1958, No. [illegible]

AUTH. : Rauser, J.
INST. : -
TITLE : The Recognition of the Stonefly Dunaya

ORIG. PUB. : Zool. Listy, 1957, Vol. [illegible], No. [illegible], 337-382

ABSTRACT : A review of the results of [illegible] of the stonefly in [illegible] of the river Dunaya 172 km in length between the mouths of the rivers Morava and Moel'. Faunistic [illegible] species (including 9 species which were expected to found in this region). Inter lacial and post lacial migrations of stoneflies in Europe. -- From the author's summary.

CARD: 1/1

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSER, Jaroslav

A contribution to the methods of preparing specimens of the copulation organs of insects. Cas entom 57 no.3:285-289 '60. (EEAI 10:1)

1. Prirodovedecka fakulta, Brno, Katedra zemepisu.
(Insects)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSER, Jaroslav

Zoogeography of the northern Moravian species of the genera Protonemura Kny. and Leuctra Steph. (Plecoptera). Prir cas slezsky 23 no.2:175-192 '62.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSER, Jaroslav

The history of distribution of a relict group of insects (Plecoptera) in Europe. Prace CSAV Brno 34 no.8:281-383 '62.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSER, J

CZECHOSLOVAKIA/Special and General Zoology - Insects. 0-3

Abs Jour : Referat Zhur - Biologiya, No 16, 1957, 69712

Author : Rauser, J.
Title : On the Recognition of the Czechoslovakian Protonemura-Larvae (Plecoptera).

Orig Pub : Prace Brnenske zaklad. CSAV, 1956, 28, No 9, 449-498

Abstract : The Protonemura larvae are difficult to differentiate and a precise determination of species is not always possible. The author has hatched from the larval state 10 species of Protonemura (184 examples), out of them two are described as new: P. hrabei and P. autumnalis. The morphology is viewed in detail, and also the syntematic placement, ecology, and the geographic distribution of the 10 studied species. The following criteria are used for the construction of the determinative tables: the form of the tracheal branchiae; the sex characteristics of the adult male larvae; the form of the

Card 1/2 - 14 -

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSER, V.; TINKA, A.

Investigations of immediate changes in cells under the influence of ultrasonics. In German. p. 63.

BIOLOGIA PLANTARUM. (Ceskoslovenska akademie ved. Biologicky ustav) Praha, Czechoslovakia, Vol. 1, no. 1, 1959

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

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSH, Georgiy Konstantinovich. VIL'CHINSKIY, I.K., podpolkovnik, redaktor; SPIRNIC, N.V., tekhnicheskiy redaktor.

[Trench mortars in battle] Minomet v boiu. Moskva, Voen.izd-vo M-va obor.SSSR, 1957. 98 p. (MLRA 10:6)
(Mortars (Ordnance))

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSER, Vladimir; RAUSEROVA, Olga

On a method for the study of inspired and expired air temperatures in a closed system. Rozhl. chir. 40 no.4:201-206 Ap '61.

1. Vyzkumny ustav balneologicky Praha 8 - Bulovka, reditel prof. dr. Karel Prerovsky Chirurgicke oddeleni nemocnice na Bulovce Praha 8, prednosta prof. dr. Jan Knobloch.

(RESPIRATION physiol)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSER, V

3

The thixotropic effect of ultrasonic waves. Vladimir Rauser (Masaryk Univ., Brno, Czech.). *Publs. fac. sci. Univ. Masaryk* 10, 197–214 (1958). Glass-supported gelatin films were treated with 5% potassium dichromate and the wet films were exposed to irradiation from an ultrasonic generator of 800 kc. frequency and an intensity of 1– watts/sq. cm. After irradiation a 0.5-mm. crystal of $AgNO_3$ was placed in the cent r of the film and the formation of Liesegang rings was followed. The no. of rings formed in 24 hrs. increased with irradiation intensity. For each intensity, the effect increased asymptotically to a limiting value with increasing duration of the irradiation. The results show that the diffusion rate through the gelatin is increased by ultrasonic waves even though the gel structure is not broken down. Herbert Morawetz

GW

11

9L

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

MUSIL, Frantisek; RAUSER, Vladimir

On the treatment of periathritis humeroscapularis calcarea.
Acta chir. orthop. trauma. Cech. 28 no.6:525-540 D '61.

1. Vyzkumny ustav traumatologicky v Brne, reditel prof. MUDr. Vladimir Novak, doktor lekarskych ved Katedra lekarske fyziky a chemie lekarske fakulty University J. Ev. Purkyne v Brne, prednosta prof. MUDr. Oktavian Wagner.
(SHOULDER dis)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSER, Vladimir; RAUSEROVA, Olga

On a method for the study of inspired and expired air temperatures in a closed system. Rozhl. chir. 40 no.4:201-206 Ap '61.

1. Vyzkumny ustav balneologicky Praha 8 - Bulovka, reditel prof. dr. Karel Prerovsky Chirurgicke oddeleni nemocnice na Bulovce Praha 8, prednosta prof. dr. Jan Knobloch.

(RESPIRATION physiol)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

KARPOV, I.Ya.; RAUSH, G.F.

Experience in the automatization of scraper conveyers in Vorkuta.
Ugol' 35 no. 4:9-10 Ap '60. (MIRA 14:4)

1. Pechorskiy nauchno-issledovatel'skiy ugol'nyy institut. Kombinat Vorkutugol'.
(Pechora Basin—Conveying machinery) (Automatic control)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSH, V.

Book shelf. Reviewed by V.Raush. Geog.v shkole 19 no.4:78-79 Jl-Ag '56. (MLRA 9:10)
(Putorana mountains) (Ulug-Khem Valley)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSH, V.

"In search of the mad river" by M. Ivin. Reviewed by V. Raush.
Geog. v shkole 22 no.1:94-95 Ja-F '59. (MIRA 12:4)
(Turkmenistan--Deserts)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSH, V.

"In the forests along the Berezina River" by V. Vol'skii. Reviewed by V. Raush. Geog. v shkole 22 no.2:94 Mr-Ap '59. (MIRA 12:6)

(Byalovezhska Pushcha--Forests and forestry)
(Vol'skii, V.)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

BLONSKAYA, Nataliya Ivanovna; RAUSH, Vera Aleksandrovna; VASIL'YEVA, O.S. redaktor; PONOMAREVA, A.A., tekhnicheskiy redaktor.

[Geography lessons for the fourth grade; work practices] Uroki geografii v 4 klasse; iz opyta raboty. Moskva, Gos. uchebno-pedagog. izd-vo M-va prosv. RSFSR, 1956. 101 p. (MLRA 10:5)

(Geography--Study and teaching)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSH, V.A.

Working with geographical pictures. Geog.v shkole 19 no.4:32-39 Jl-Ag '56. (MLRA 9:10)
(Geography--Audio-visual aids)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RUSSIA

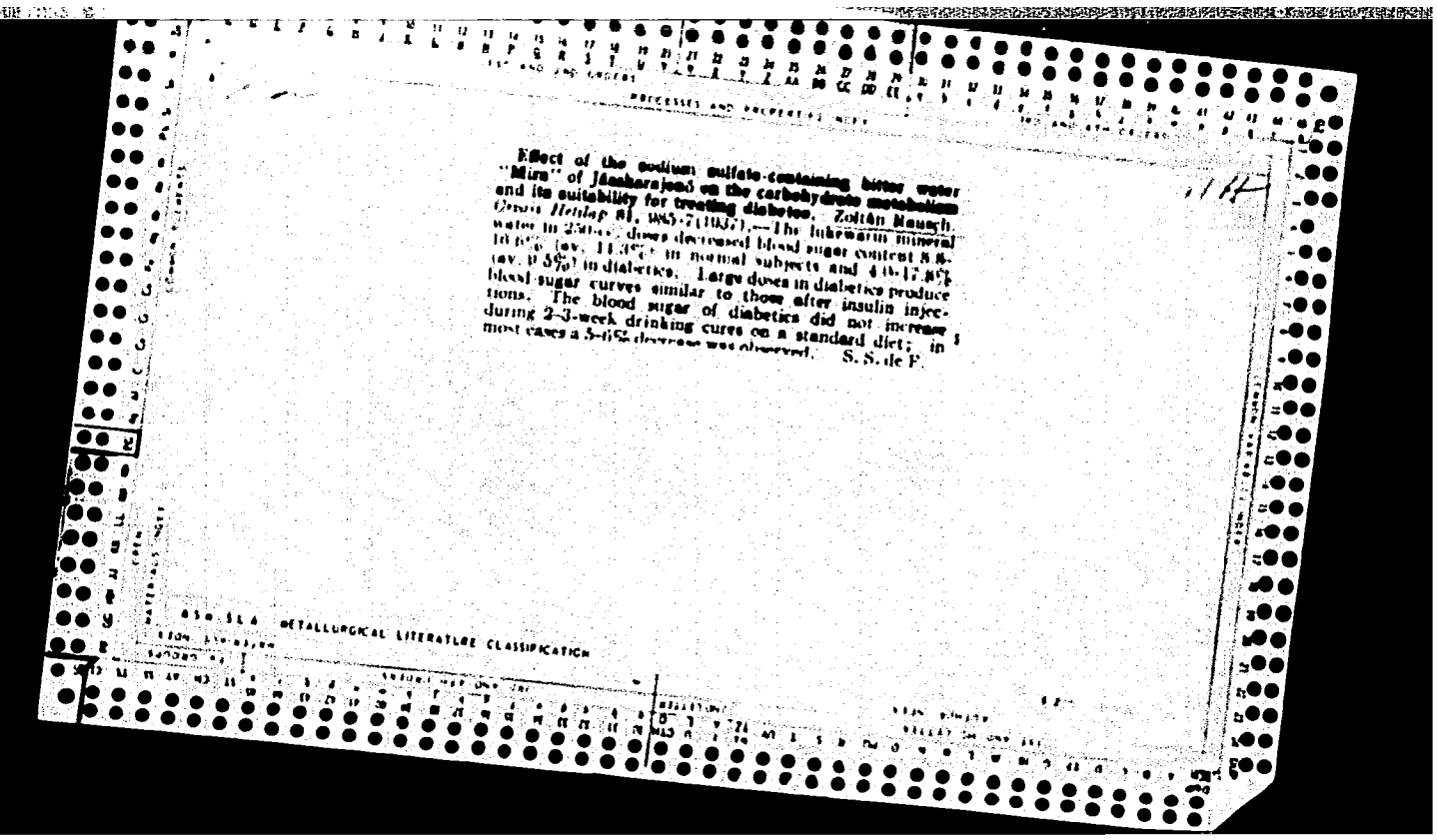
(2)

Cathodic protection with galvanic anodes. W. Kausch (Metallgesellschaft A.-G., Frankfurt a./Main, Ger.). *Metall* 8, 193–202(1954).—This method is used for protection of metal tanks against soil corrosion. The metals suitable for protective anodes are Zn, Al, and Mg, but Mg is the metal most extensively used. Methods of installation are described. H. Steertz

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

PROCESSES AND PROPERTIES INDEX

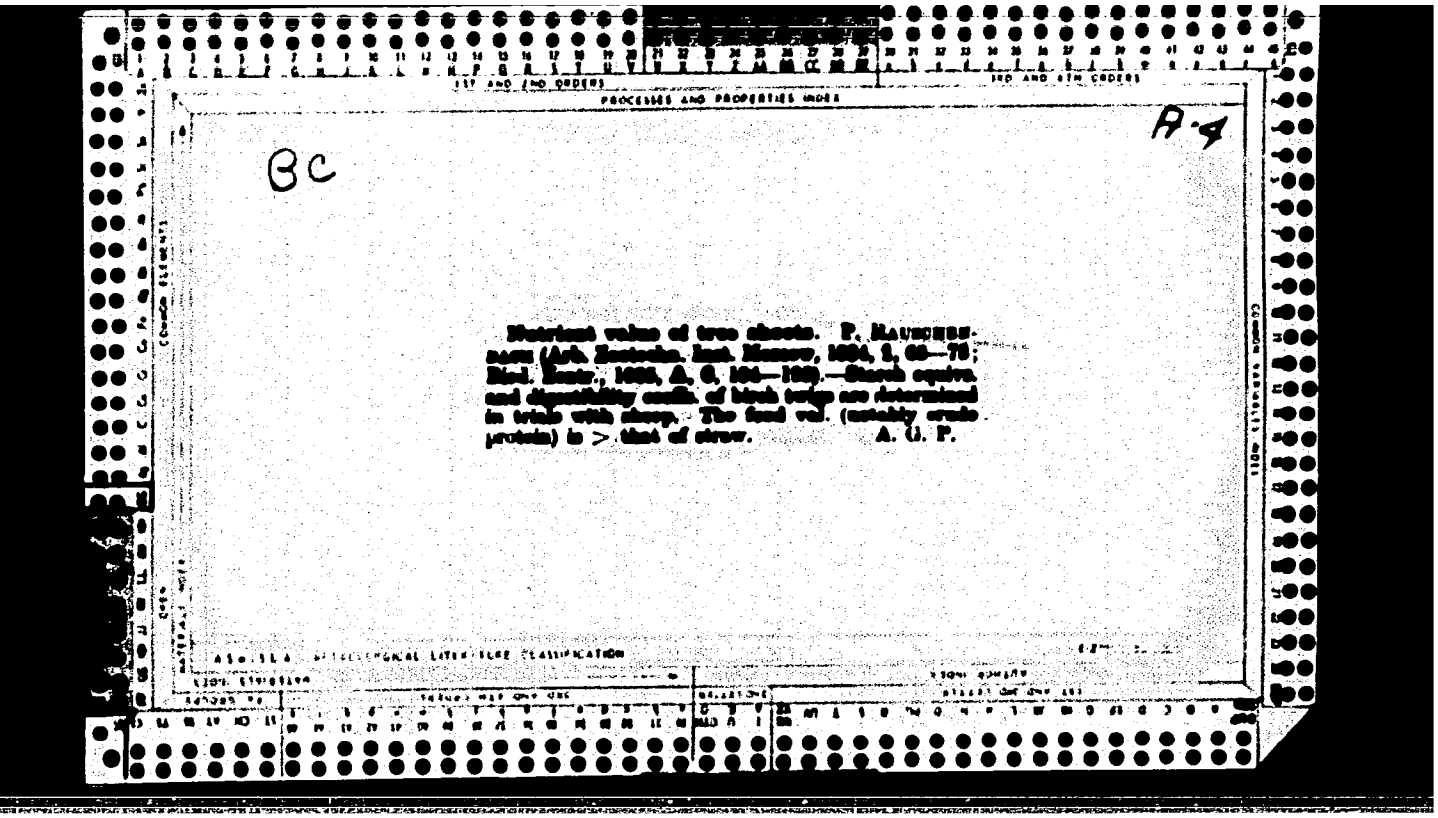


**Effect of the sodium sulfate-containing bitter water "Mira" of Jässharajonö on the carbohydrate metabolism and its suitability for treating diabetes.** Zoltán Rausch. *Orvosi Hetilap* 81, 985-7(1937).—The lukewarm mineral water in 250-cc. doses decreased blood sugar content 8.8-16.6% (av. 11.3%) in normal subjects and 4.0-17.8% (av. 9.5%) in diabetics. Large doses in diabetics produce blood-sugar curves similar to those after insulin injections. The blood sugar of diabetics did not increase during 2-3-week drinking cures on a standard diet; in most cases a 5-6% decrease was observed. S. S. de F.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444



1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

BC

A-4

Nutrient value of tree shoots. P. Rauschenbach (Arb. Zootechn. Inst. Moscow, 1934, 2, 68—78; Biol. Zentr., 1935, A, 6, 104—105).—Starch equivs. and digestibility coeffs. of birch twigs are determined in trials with sheep. The food val. (notably crude protein) is > that of straw. A. G. P.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSER, Jaroslav, dr. (Brno, Sumavska 30)

Contribution to the knowledge of the larvae of Amphinemura family (Plecoptera) in Czechoslovakia. Cas entom 60 no.1/2:32-54 '63.

1. L'Academie des Sciences Tchecoslovaque, Institut de Geographie, Brno.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

JAROSLAV, RAUSER RAUSER, JAROSLAV

CZECHOSLOVAKIA / General and Special Zoology. Insects P

Abs Jour: Ref Zhur-Biol., No 1, 1958, 2150

Author : Rauser Jaroslav
Inst :
Title : On the Understanding of Stoneflies (Plecoptera) of the Middle Course of the Moravice River.

Orig Pub: Vest. Ceskosl. spolec. zool., 1956, 20, No 2, 110-142

Abstract: List of 20 species of stoneflies of Silesia with information on which part of the summer and around which heights they lived. A table is given of the distribution of these species in reservoirs according to the degree of water pollution as a factor. The finding is noted of the Ice age relic, Diura bicaudata (L) in the basin of the Moravice river. The larva Leuctra prima Knv and larvae of three

Card 1/2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

CZECHOSLOVAKIA / General and Special Zoology. Insects P

Abs Jour: Ref Zhur-Biol., No 1, 1958, 2150

Abstract: different stages of Perlodes microcepala (Pict.), are described for the first time. There are definitive tables of larval stages of the Perla burmeisteriana Claas and P. marginate (Panz). The melanism of the first species is described.

Card 2/2



APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

EXCERPTA MEDICA Sec. 6 Vol. 11/9 Sept. 57

RAUSER V.

5013. RAUŠER V. Ústav Lék. Fysiky MU, Brno. *Moznosti a použití ultrazvuku v diagnostice. Possibilities and employment of ultrasound in diagnostics VNITŘ. LÉK. 1957, 3/1 (13-17) Tables 1

Various methods are dealt with of ultrasound diagnostics mainly as an aid for identi-

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

50/13 CONT.

fying foreign bodies, concrements and gross changes in the tissue. From the physician's point of view the method of ultrasound diagnostics does not allow one to ascertain fine changes of the tissue in situ, however, some uses are surpassing roentgenoscopy, when certain masses not differing in atom weight are not sufficiently opaque. The possibility of determining the usefulness for employing ultrasound diagnostics in some matters or changes is pointed out.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

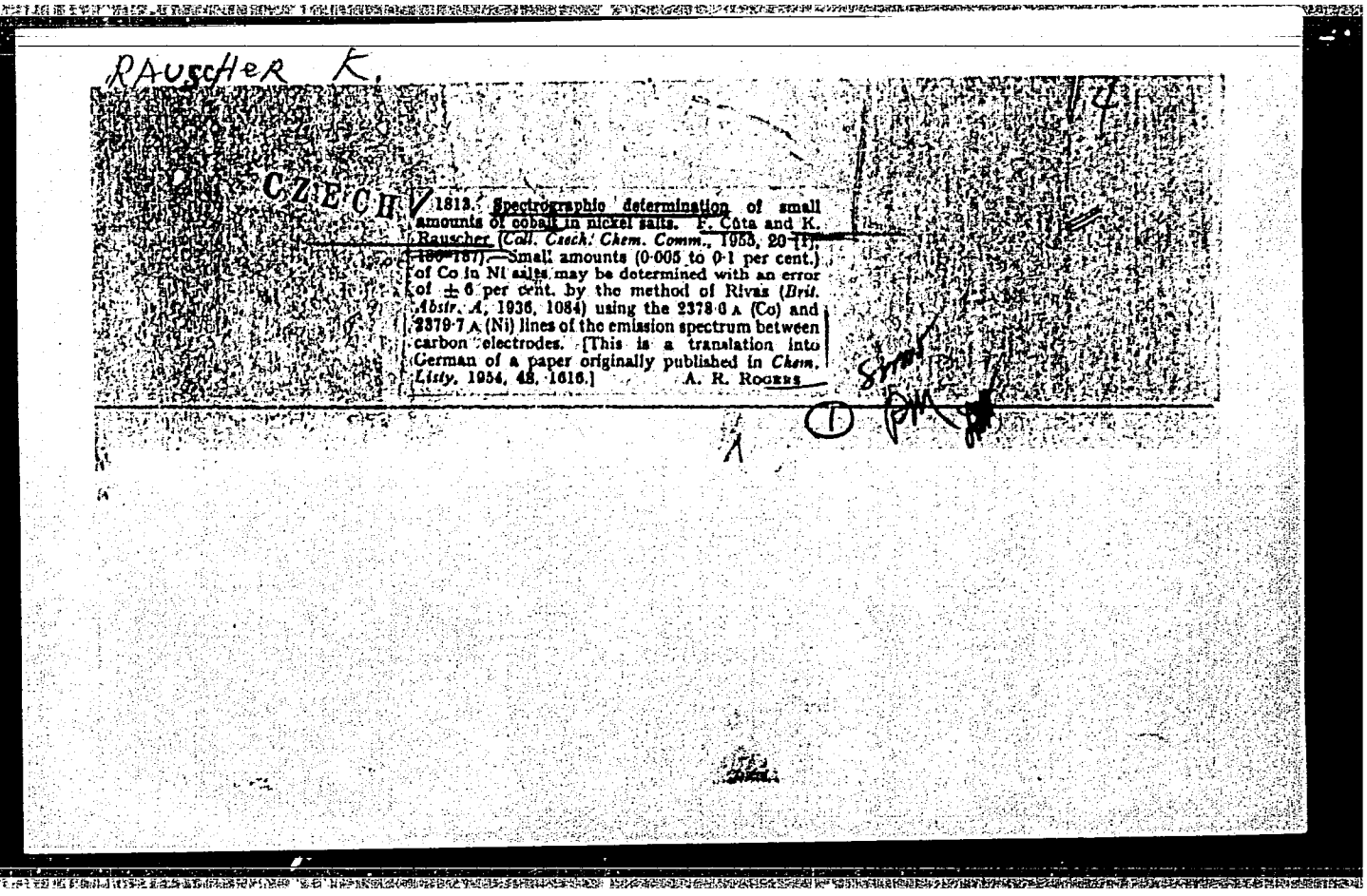
RAUSCHER, K.

Spectrographic determination of small amounts of cobalt in nickel. K. Rauscher (Univ. Prague). *Sborník Celostátní Pracovní Konf. Anal. Chemiků* 1, 39-41(1952) (Pub. 1953).—Co in Ni was detd. spectrographically in a condensed 16-k.v. spark, after evapg. about 0.1 ml. of 0.5*M* $Ni^{++}$ soln. on a C electrode. A Hilger quartz spectrograph, type medium, was used with slit width 0.025 mm., electrode gap 2–2.85 mm., and approx. 1-min. exposure. A Hilger microphotometer H 451 was used. The amt. of soln. evapd. had some effect on the results. Three homologous Co-Ni line pairs could be used, of which Co 2378.6/Ni 2379.7 Å. was the best at low Co concns. But in the presence of Fe and Mn other lines may have to be used. Amts. of Co > 0.1% can be detd. in the presence of 4% Fe, Cu, Mn, or Na.

I. Newcombe

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444



RAUSCHER K.

CZECH

1813. Spectrographic determination of small amounts of cobalt in nickel salts. F. Cóta and K. Rauscher (*Coll. Czech. Chem. Comm.*, 1953, 20 [1], 180–187).—Small amounts (0·005 to 0·1 per cent.) of Co in Ni salts may be determined with an error of ± 6 per cent. by the method of Rivas (*Brit. Abstr. A*, 1936, 1084) using the 2378·6 A (Co) and 2379·7 A (Ni) lines of the emission spectrum between carbon electrodes. [This is a translation into German of a paper originally published in *Chem. Listy*, 1954, 48, 1616.] A. R. ROGERS

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSCHER, K.

CZECH

Spectrographic determination of small amounts of cobalt in nickel salts. František Čůta and Karel Rauscher (Vysoká škola chem. Prague). *Chem. Listy* [illegible]. — For the spectrographic detn. of 0.005 to 0.1% Co in Ni salts, the lines Co 2378.6 A. and Ni 2379.7 A. are recommended. The optimum working procedure is described in detail.

E. Frdös

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

~~KAREL~~, RAUSCHER KAREL

**Tocopherols from deodorization wastes.** Karel Rauscher, Miloš Hejtmánek, and Zdeněk Kučera. Czech. 84,369, Sept. 1, 1955. A concentrate of α-, β-, and γ-tocopherols (I) is obtained by hydrogenation or esterification of the mixt. of closely related compds. present in the deodorization wastes (II) resulting from the treatment of vegetable oils with superheated steam. II is hydrogenated at 180–200° (Ni catalyst) to an iodine no. of 20. The reaction product is dissolved by refluxing with 8 times its vol. of $Me_2CO$ and the soln. is cooled to −40 to −50°. After sepg. the solid substances by filtration, $Me_2CO$ is expelled by a stream of H and the remaining brown oil contg. 10–15% I is purified by distn., yielding a yellow oil, $b_{0.005-0.1}$ 240° and contg. 20–30% I. L. J. Urbánek

3

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSCHER, KAREL

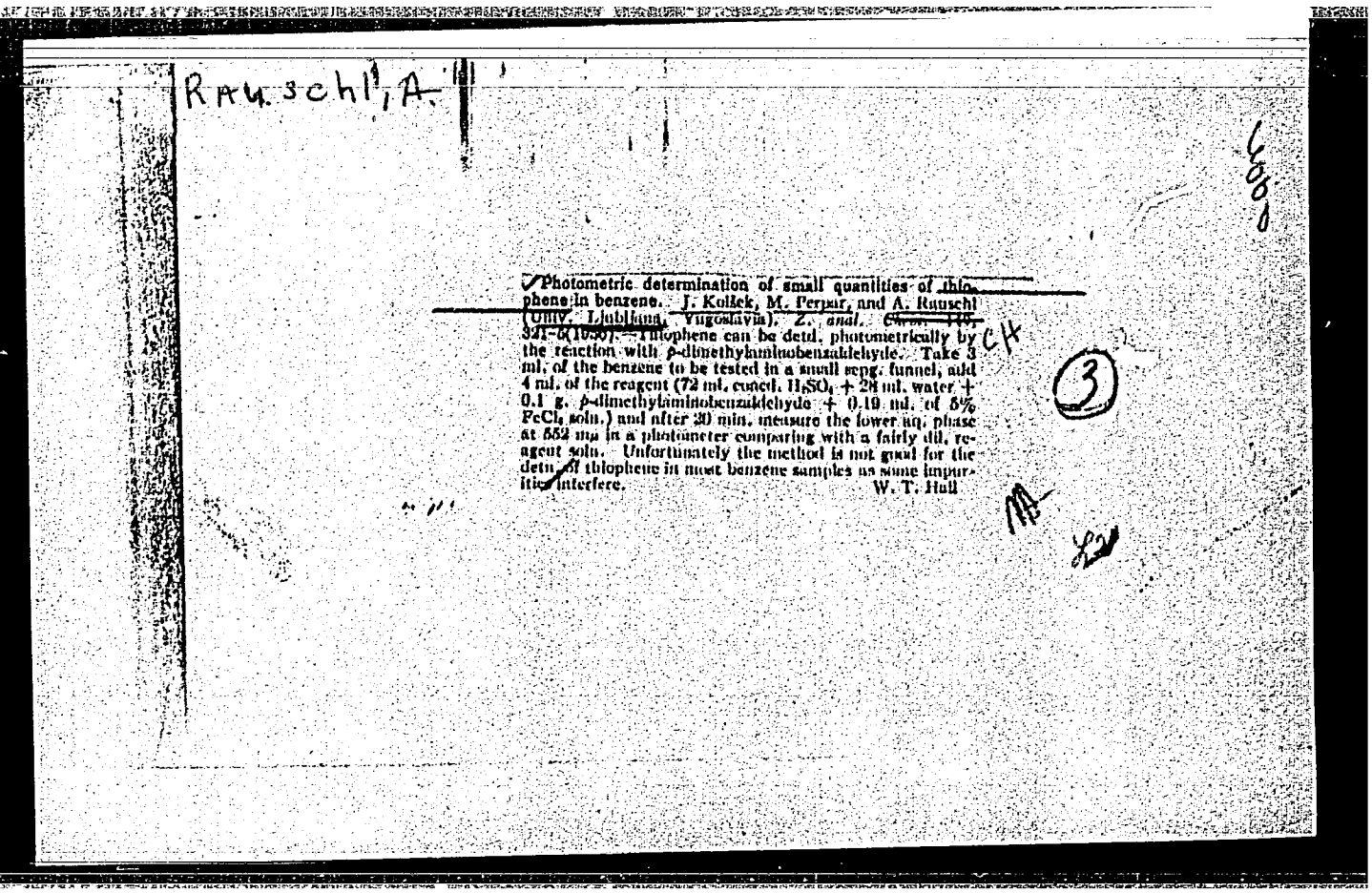
CZECH

Spectrographic determination of small amounts of cobalt in nickel salts. František Čůta and Karel Rauscher. *Collection Czechoslov. Chem. Communs.* 20, [illegible] German).—See *C.A.* 49, 4446d. E. J. C.

BI

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444



Rauschl, A.

✓Photometric determination of small quantities of thiophene in benzene. J. Kollek, M. Perpar, and A. Rauschl (Univ. Ljubljana, Yugoslavia). Z. anal. Chem. 115, 321–5(1938).—Thiophene can be detd. photometrically by the reaction with p-dimethylaminobenzaldehyde. Take 3 ml. of the benzene to be tested in a small sepg. funnel, add 4 ml. of the reagent (72 ml. concd. $H_2SO_4$ + 28 ml. water + 0.1 g. p-dimethylaminobenzaldehyde + 0.19 ml. of 5% $FeCl_3$ soln.) and after 30 min. measure the lower aq. phase at 552 mμ in a photometer comparing with a fairly dil. reagent soln. Unfortunately the method is not good for the detn. of thiophene in most benzene samples as some impurities interfere. W. T. Hall

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSCHL, A.

8

2505. Photometric method for the determination of small amounts of thiophen in benzene. J. Kolšek, M. Perpar and A. Rauschl (Inst. Org. Chem., Ljubljana Univ., Yugoslavia). *Mikrochim. acta*, Wien, 1959, (5), 821–825.—Thiophen in purified benzene is determined photometrically by reaction with van Urk's reagent [*p*-dimethylaminobenzaldehyde (I) in aq. $H_2SO_4$ containing a little $FeCl_3$]. The optimum sensitivity is 0·4 mg per ml and 0·01 mg per ml can be readily determined. The method is unsuitable for crude benzene, as other impurities interfere. *Procedure*—To the diluted benzene sample (3 ml) in a separating funnel add the reagent (4 ml of a soln. of 0·1 g of I in 72 ml of conc. $H_2SO_4$ and 28 ml of water containing 0·19 ml of 5 per cent. $FeCl_3$). Shake the soln. for exactly 10 min., dilute immediately with water (10 ml), and set aside for 5 min. Determine the extinction, at 552 mμ, of the lower (aq.) phase in the twentieth minute and compare with a blank. J. P. STERN

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSER, Vladimir, asistent ustavu lekarske physiky MU v Brne.

Teaching of medical physics. Cas. lek. cesk. 93 no.47:1308-1309 19 Nov 54.

(EDUCATION, MEDICAL
med. physics in)
(PHYSICS
med., importance in med. educ.)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

Lab. Chemistry, Leningrad Inst. Exact Mechanics and Optics, (-1946-).

"Acoustical Electrochemical Phenomena. The Absorption of Sound by Polarized Electrodes and Membranes in Non-Aqueous Solutions."

Ahur. Fiz. Khim., No. 3, 1946.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

ZHILINSKIY, Kazimir Yanovich; BLINKOV, L.M., inzh., retsenzent; RAUSH, O.I., inzh., retsenzent; FAVOROV, B.P., nauchnyy red.; KUSKOVA, A.I., red.; ERASTOVA, N.V., tekhn. red.; KRYAKOVA, D.M., tekhn. red.

[Heat insulation of ships]Sudovaia teploizoliatsiia. Izd.2., perer. i dop. Leningrad, Sudpromgiz, 1962. 404 p. (MIRA 16:2)

(Insulation (Heat)) (Shipbuilding materials)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

FAKTOROVICH, Lev Mikhaylovich; RAUSH, O.I., nauchnyy red.; DOLMATOV, P.S., vedushchiy red.; GENNAD'YEVA, I.M., tekhn.red.

[Designing and installing heat insulation] Proektirovanie i montazh teplovoi izoliatsii. Leningrad, Gos.nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry, Leningr.otd-nie, 1960. 439 p. (MIRA 13:5)

(Insulation (Heat))

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

ZHILINSKIY, Kazimir Yanovich; RAUSH, Oskar Ivanovich; LOBANOVA, K.I., inzh., retsenzent; FAVOROV, B.P., inzh., retsenzent; SOSIPATROV, O.A., red.; KOROVENKO, Yu.N., tekhn. red.

[Handbook on the heat insulation of ships] Spravochnik po sudovoi teploizoliatsii. Leningrad, Sudpromgiz. 1963. 340 p. (MIRA 17:3)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSH, Vera Aleksandrovna; YUZEFOVICH, Yevgeniya Filippovna; RODIONOVA, F.A., red.; SHIBANOVA, A.A., red.; KARPOVA, T.V., tekhn. red.

[Reader on physical geography; textbook for teachers] Khrestomatiia po fizicheskoi geografii; posobie dlia uchitelei. Moskva, Uchpedgiz, 1961. 334 p. (MIRA 15:7)
(Physical geography)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

SENDEROVA, G.M., otv.red.; SHUROV, S.I., red.; BASHLAVINA, G.N., red.; VORONINA, A.N., red.; GURZVICH, I.V., red.; ZASLAVSKIY, I.I., red.; KOZLOV, F.M., red.; LARIN, D.A., red.; RAUSH, V.A., red.; SAMOYLOV, I.I., red.; SENDEROVA, G.M., red.; SLADKOVA, Ye.A., red.; STROYEV, K.F., red.; SCHASTNEV, P.N., red.; TUTOCHKINA, V.A., red.; ERDELI, V.G., red.

[Geographical atlas for the fourth grade] Geograficheskii atlas dlia 4-go klassa. Moskva, Glav.uprav.geodez. i kartografii M-va geol. i okhrany nedr SSSR, 1960. 16 p. (MIRA 13:8)
(Atlases)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

BLONSKAYA, Nataliya Ivanovna, RAUSH, Vera Aleksandrovna,; VASIL'YEVA, O.S., red.; PODOL'SKAYA, M.Ya., red. kart.; DZHATIYEVA, F.Kh., tekhn. red.

[Geography lessons for the 4th grade] Uroki geografii v IV klasse; iz opyta raboty. Izd. 2. Moskva, Gos. uchebno-pedagog. izd-vo M-va prosv. RSFSR, 1958. 103 p. (MIRA 11:11)
(Geography--Study and teaching)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSH, V.A.

RAUSH, V.A.

Extracurricular work in geography in the Soviet school. Geog. v shkole 20 no.5:40-46 S-O '57. (MIRA 10:12)
(Geography--Study and teaching)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSH, V.A.

CHEFRANOV, S.V. YUZEFOVICH, Ye.F.; RAUSH, V.A.; SMIRNOVA, N.P., red.; SAKHAROVA, N.V., tekhn.red.

[Readings in physical geography; a manual for teachers] Khrestomatiia po fizicheskoi geografii; posobie dlia uchitelei. Izd. 5-oe. Moskva, Gos. uchebno-pedagog. izd-vo M-va prosv. RSFSR, 1957. 398 p. (MIRA 11:5)
(Physical geography)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSH, V. A.

CHEFRANOV, S.V., sostavitel'; YUZEFOVICH, Ye.F., sostavitel'; RAUSH, V.A., sostavitel'; SMIRNOVA, N.P., redaktor; SAKHAROVA, N.V., tekhnicheskiy redaktor.

[Selective readings on physical geography; manual for teachers in secondary schools] Khrestomatiia po fizicheskoi geografii; posobie dlia uchitelei srednei shkoly. Sostavili: S.V. Chefranov, E.F.IUzefovich, V.A. Raush. Izd. 4., perer. Moskva, Gos. uchebno-pedagog. izd-vo, 1954. 342 p. (MLRA 7:7)
(Physical geography)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

BLONSKAYA, Nataliya Ivanovna; RAUSH, Vera Aleksandrovna; VASIL'YEVA, O.S., redaktor; MAKHOVA, N.N., tekhnicheskiy redaktor

[Book of readings in geography, for class 4] Kniga dlia chteniia po geografii, 4-yi klass. Moskva, Gos.uchebno-pedagog. izd-vo Ministerstva prosveshcheniia RSFSR, 1956. 151 p. (MLRA 9:7)
(Geography)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSH, V.A.

Readers write us. Geog. v shkole no.3:57-58 My-Je '53. (MLRA 6:6)
(Geography--Study and teaching)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

Name : RAUSHENBAKH, B. V.

Remarks: B. V. Raushenbakh edited, and wrote the introduction to M: Puti Osushchestvleniya Kosmicheskikh Poletov (Ways to Space Flight), by G. Obert (i.e., Hermann Oberth), Moskva, 1948, which is a condensed translation from the German. Raushenbakh makes critical remarks about Oberth's work and corrects his calculations in numerous instances.

Source : M: Puti Osushchestvleniya Kosmicheskikh Poletov (Ways to Space Flight), by G. Obert, Moskva, 1948, passim

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

KRASHENBAKH, B. V.

1208. Raushenbakh, B. V., On a remark by Rayleigh concerning [illegible] sounds (in Russian), *Doklady Akad. Nauk SSSR (N.S.)* 91, 4, 749-752, Aug. 1953.

Author considers neutral oscillations, neither increasing nor decreasing in amplitude, of a gaseous system containing an interface where heat is released. For neutral oscillations, pressure is 90° out of phase with velocity on either side of the interface. He assumes small amplitude linear oscillations and isentropic transfer of gas across the interface, and writes the following general equations

$$p_1 = a_{11}p_1 + a_{12}v_1 + a_{13}q$$

$$v_2 = a_{21}p_1 + a_{22}v_1 + a_{23}q$$

where 1 and 2 refer to before and after heating, respectively, $a_{ik}$ are constants which depend on the parameters of the system, p is oscillating pressure, v is oscillating velocity, and q is oscillating heat release.

The dot products $p_1 \cdot v_1$ and $p_2 \cdot v_2$ are both zero. Thus, taking $p_1$ as the $x$-axis and $q_1$ as the $y$-axis, the scalar product of the above equations becomes

$$Ap_1q_x + Bv_1q_y + C(q_x^2 + q_y^2) + Dp_1^2 + Ev_1^2 = 0$$

The values of q for neutral oscillations are on a circle with radius and position of center determined by $p_1$ and $v_1$.

For a system generating Rijke gauze tones, $B/C \geq 0$, $A/C \leq 0$, and $(D/C)p_1^2 + (E/C)v_1^2 \geq 0$; neutral oscillations are impossible only with heat addition in the second quadrant. A neutral oscillation is possible with heat addition in the third quadrant; this apparently conflicts with Rayleigh's hypothesis that heat must be added in phase with the pressure to produce driving. When the mean rate of flow is zero, the equation agrees with Rayleigh's hypothesis. For a mean rate of flow greater than zero, neglect of kinetic energy by Rayleigh is indicated as the cause of the discrepancy.

If q becomes sufficiently large, the phase between the $p_2 - v_2$ system and the $p_1 - v_1$ system shifts to such an extent that no q exists giving neutral oscillations. (Reviewers note: Author has not proved that Rayleigh's hypothesis is not sufficient by itself, providing the heat energy is properly partitioned between the two sides of the interface.) W. R. Dennis, USA

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSHENBAKH, B.V.

"On the Problem Concerning the Longitudinal Stability of an Aircraft in Unfavorable Flight Conditions," by Tiberiu Hacker, Studii i cercetari mes. apl., Vol 6, No 3-4, 1955, pp 269-297, (from Referativnyy Zhurnal -- Mekhanika, No 1, Jan 57, Abstract No 295, by B. V. Raushenbakh)

The article discusses the longitudinal disturbed motion of an aircraft on the supposition that the undisturbed motion is rectilinear and horizontal. A dimensionless system of equations is introduced, in which the unit of velocity is the maximum flying speed. In the case when the undisturbed motion of the airplane is set, the minimum flying speed is the most disadvantageous from the viewpoint of the short periodic stage of the disturbed motion of the airplane.

Adequate conditions of stability occur for cases of acceleration and deceleration of the undisturbed motion. It is shown that during short periodic disturbed motion a statically stable airplane can lose dynamic stability only with slow undisturbed motion.

A determination of the critical value of the acceleration is given for the latter case. In addition, the disturbance of the angle of attack and the angular velocity of pitching are given. The damping velocity of some major functions, which limit from above, at any moment of time, the amplitudes of the above-indicated disturbances is also found. It was shown that the damping velocity of the major functions in general grows with the increase of the flying speed. (U)

Sum. 1345

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSHENBAKH, B.V.

AUTHOR: Raushenbakh, B.V. 20-2-16/62

TITLE: On Energy Sources at the Thermal Excitation of Sound
(Ob istochnikakh energii pri termicheskom vozbuzhdenii zvuka)

PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol. 115, Nr 2, pp. 256 - 258
(USSR)

ABSTRACT: The author thinks that the problem of the energy source on the occasion of the thermal excitation of sound in a moving gas is in various works incorretly solved. The author puts down the equation of the energy flow in the form $E = (\rho v^2/2) + \rho v c_v T + pv$. In this connection $\rho$ signifies the density of the gas, p - the pressure, v - the velocity of flow, $c_v T$ - the internal energy. The first two terms of the sum describe the transfer of energy by the mass flow and the last term of the sum describes the transfer of energy by means of pressure. The last term pv is most important. An immovable domain $\Sigma$ of the heat conductor be bounded by two control surfaces which stand vertical to the axis of the here-examined unidimensional surface. This domain $\Sigma$ have a small extension as compared to the wave length of the oscillations to be excited and therefore the hypothesis of the principle of immobili-

Card 1/3

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444



On Energy Sources at the Thermal Excitation of Sound

ty can be applied to the processes taking place within $\sum$ . The author compares the energy flows pv on the planes bounding the domain $\sum$ and he poses the problem of the amount of energy which is emitted by this domain of the heat conductor. The source of this energy is also treated here. First the laws of conservation for this energy are separately written down for the flow element in the reference system moved together with it and for the center of gravity of this system. The flow of energy pv emitted by the domain $\sum$ is equal to $p_2v_2 - p_1v_2$ and thus consists of two terms of a sum: The first one is connected with the addition of heat and with the modification of the flow of the internal energy, the second term is connected with the mechanical energy to be supplied and with the modification of the flow of the kinetic energy. The assumption of the flow parameters on the boundaries of the domain is not sufficient. Then it is assumed that the quantities p and v have the components $\delta p$ and $\delta v$ which change harmonically with progressing time. An expression is then derived for the mean accoustic energy emitted by the domain $\sum$ . There are 3 references, 1 of which is Slavic.

Card 2/3

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

20-2-16/62

On Energy Sources at the Thermal Excitation of Sound

PRESENTED: February 14, 1957, by M.V. Keldysh, Academician

SUBMITTED: February 11, 1957

AVAILABLE: Library of Congress

Card 3/3

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

RAUSHENBAKH, B. V. (Moscow)

"Energy Sources for Excitation of Acoustic Oscillations in One-Dimensional Gas Flows."

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

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

28344 S/124/61/000/007/031/044
A052/A101

13.2000

AUTHOR: Razumeykin, B. V., Tokar', Ye. N.

TITLE: Some problems of control in interplanetary space

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 7, 1961, 13, abstract 7A131 (V sb. "Iskusstv. sputniki Zemli. Vyp. 5". Moscow, AN SSSR, 1960, 41-53)

TEXT: The possibility of controlling the motion of an interplanetary missile by means of prescribing the rotation law of the reactive control flywheels is being proved. The method of reducing the energy consumption at such a control are investigated. As an example the case of small deviations of the missile from the pre-selected direction is considered.

V. Degtyarev

[Abstracter's note: Complete translation]

Card 1/

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

23483

S/123/61/000/009/026/027
A004/A104

11.7300

AUTHOR: Raushenbakh, B. V.

TITLE: Theoretical analysis of vibrating combustion of a gas mixture in a tube

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 9, 1961, 20, abstract 9I166. (V sb. "3-e Vses. soveshchaniye po teorii goreniya. T. I.". Moscow, 1960, 51-59)

TEXT: The theoretical solution of the problem of vibrating combustion is divided into 2 parts: the description of the acoustic properties and the description of the combustion zone. The second problem is solved by an analysis of the stability of the flat d sion plane between the cold gas and the combustion products. From the Eu uation and the continuity in a linearized form the frequency, amplitude ar. er parameters for the vibrating combustion in a tube are found. With the aid o. the obtained equations the author investigates the zones in which it is possible to excite vibrating combustion in tubes closed at one end. It is shown that zones of stable and unstable vibrating combustion are alternating in tubes. The obtained solution is confirmed by tests. I. Barskiy
[Abstractor's note: Complete translation]

Card 1/1

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

PHASE I BOOK EXPLOITATION SOV/5827

Raushenbakh, Boris Viktorovich

Vibratsionnoye goreniye (Oscillatory Combustion) Moscow, Fizmatgiz, 1961. 500 p. 7,000 copies printed.

Ed.: O. E. Tsynkova; Tech. Ed.: N. Ya. Murashova.

PURPOSE: This book is intended for scientists, engineers, aspirants, and students of advanced courses at universities and engineering colleges who are concerned with problems of combustion theory and the theory of vibrations of continuous media. It may also be useful to persons working in the field of engine construction and combustion engineering.

COVERAGE: The book is devoted to the problem of instability of the combustion process encountered in the development of liquid-fuel rocket engines, ramjet engines, highly-forced furnaces of power plants, and in the performance of many physical experiments and tests in combustion theory. The book systematically presents modern theory of the excitation of longitudinal acoustic vibrations due to a heat supply and laws governing this type of vibration are considered.

Card 1/7

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444



For their analysis, information from hydromechanics, acoustics, and combustion theory is used along with the mathematical apparatus of control theory and vibration theory. The author thanks Engineer L. D. Shitova, Engineer T. M. Kuvardina, and N. S. Natanson. Numerous references appear in footnotes to the text.

TABLE OF CONTENTS:

Preface 6

Introduction 9

Ch. I. General Characteristics of Vibrations Excited by a Heat Supply 15
1. Some experimental facts 15
2. Idealized representation of the process of self-excitation of longitudinal acoustic vibrations due to combustion 19

Ch. II. Propagation of Disturbances in a Moving Gas 29
3. Linearization of the equations of hydromechanics 29
4. Acoustic waves in a moving nonisentropic gas 35
5. Example of a very simple boundary-value problem 42
6. Standing waves p and v 47
7. Traveling waves u, v, and s 59



APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

KAUSHENBAKH, B.V., doktor tekhn. nauk, red.

[Transactions of the First All-Union Scientific and Engineering Conference on the Problem of Vibratory and Pulsating Combustion] Trudy Vsesoiuznoi nauchno-tekhnicheskoi konferentsii po probleme vibratsionnogo i pul'satsionnogo gorenila. Pod red. B.V.Kaushenbakha. Moskva, Sektor nauchno-tekhn. informatsii GIAP, 1962. 115 p. (MIRA 17:10)

1. Vsesoyuznaya nauchno-tekhnicheskaya konferentsiya po probleme vibratsionnogo i pul'satsionnogo goreniya. 1st, 1961.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

L 32971-65 EPA/EWT(l)/EPA(s)-2/EWT(m)/EPF(c)/EPR Paa-4/Pr-4/Ps-4/Pt-10
WW/JW/JWD/GS

ACCESSION NR: AT5004080 S/0000/62/000/000/0005/0007

AUTHOR: Raushenbakh, B. V. (Doctor of technical sciences)

TITLE: Introductory word /Vibration Burning in Various Types of Combustion Chambers/

SOURCE: Vsesoyuznaya nauchno-tekhnicheskaya konferentsiya po probleme vibratsionnogo i pul'satsionnogo goreniya. 1st, 1961. Trudy. Moscow, Sektor nauchno-tekhn.-inform. GIAP, 1962, 5-7

TOPIC TAGS: combustion analysis, combustion research, combustion theory, pulsation combustion, vibration combustion, scientific conference

ABSTRACT: This paper was written as an introduction to the transactions of the All-Union Scientific and Technical Conference on the Problem of Pulsation and Vibration Combustion. This is the first conference devoted to problems of vibration combustion in industrial installations. Therefore most of the papers are in the nature of preliminary reports. Many of the papers have subjects in common with one another, therefore it was necessary to avoid repetition. A survey of the reports which were presented indicates that not all organizations which are doing useful work on vibration combustion have the necessary instruments. More than half

Card 1/2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

L 32971-65

ACCESSION NR: AT5004080

0

of the papers are devoted to a study of vibration burning in various types of combustion chambers and to the industrial use of this form of combustion. Most of the reports deal with problems which have arisen in actual practice.

ASSOCIATION: none

SUBMITTED: 29Dec62 ENCL: 00 SUB CODE: FP, GO

NO REF SOV: 000 OTHER: 000

Card 2/2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

L 16477-65 EWT(d)/EWT(m)/EPF(c)/EWP(f)/T-2 Pr-4 AEDC(b)/ASD(p)-3/AFETR/AFTC(a)/AFTC(p) WE

ACCESSION NR AM4045080 BOOK EXPLOITATION

Raushenbakh, Boris Viktorovich; Bely*y, Sergey Andreyevich; Besplaov, Ivan Vanifat'yevich; Borodachev, Vadim YAkovlevich; Voly*nskiy, Mark Semenovich; Prudnikov, Aleksandr Grigor'yevich

Physical principles of operation in air-jet engine combustion chambers (Fizicheskiye osnovy* rabochego protsessa v kamerakh sgoraniya vozdushno-reaktivny*kh dvigateley), Moscow, Izd-vo "Mashinostroyeniye", 1964, 525 p. illus., biblio. Errata slip inserted. 4,000 copies printed.

TOPIC TAGS: jet engine, combustion chamber, fuel combustion

PURPOSE AND COVERAGE: This book presents the physical principles of fuel combustion in air flows and methods of calculating combustion chambers of air-jet engines; the thermodynamic and aerodynamic characteristics of combustion chambers, vaporization and mixing of fuels, ignition and combustion of gas mixtures in laminar and turbulent flows, combustion behind a body with poor flow, and the processes of heat exchange and heat protection of chanbers are considered. The book is intended for researchers and engineers specialized in aviation and other fields. It will also be useful to students in higher technical educational institutions.

Card 1/2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

L 16477-65
ACCESSION NR AM4045080

TABLE OF CONTENTS [abridged]:

Foreword -- 3
Symbols -- 6
Introduction -- 10
Ch. I. Some problems of the thermodynamics of combustion chambers -- 15
Ch. II. Fuel mixing -- 53
Ch. III. Ignition and combustion of homogeneous fuel-air mixtures in laminar flow -- 175
Ch. IV. Turbulence of air flows -- 210
Ch. V. Combustion of homogeneous fuel-air mixtures in turbulent flow -- 255
Ch. VI. Vibration regimes of combustion -- 348
Ch. VII. Flame stabilization in flow of a fuel mixture -- 371
Ch. VIII. Combustion of fuel-air mixtures behind a body with poor flow --403
Ch. IX. Cooling the walls of a combustion chamber and nozzle -- 440

SUB CODE: PR SUBMITTED: 20Mar64 NR REF SOV: 112

OTHER: 079

Card 2/2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001444

L 34974-66 EWP(m)/EEC(k)-2/EWT(d)/EWT(l)/FBD/FSS-2 IJP(c) JT/JW/BC/AST
ACC NR: AP6019590 SOURCE CODE: UR/0293/66/004/003/0367/0377

AUTHORS: Legostayev, V. P.; Raushenbakh, B. V.

59
B

ORG: none

TITLE: Single axis orientation system of the space ship Vostok relative to the sun

SOURCE: Kosmicheskiye issledovaniye, v. 4, no. 3, 1966, 367-377

TOPIC TAGS: satellite, orbit space flight, satellite orientation, gyroscope

ABSTRACT: The solar orientation system used in the manned-satellite series "Vostok" is discussed. This orientation system consists of a photoelectric (solar) sensor, three two-stage gyroscopes, a logic network, and small compressed air reaction jets. Each component of the system is discussed in some detail. It is shown that the three relay type signals which indicate the illuminated and dark fields-of-view of the solar sensor constitute a very simple system. The two-stage gyroscopes serve to damp the angular motion of the satellite along each axis. The angular velocity sensor placed on the pitch axis has two regimes, whereas the sensor placed on the yaw axis has only one. The logic for orienting the space ship relative to the sun is discussed in detail, first for pitching motion and next, for the yawing motion. The dynamics of these two motions are analyzed, leading to the equations for the angular displacement $\delta$ which for yaw gives $\ddot{\delta} + 2n\dot{\delta} + k^2\delta + a\,\mathrm{sign}\,\dot{\delta} + b\,\mathrm{sign}\,\delta = m\ddot{\varphi}$.

Card 1/2 UDC: 629.196.3:621.070

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014443