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L 9263-66 EWT(m)/T/ETC(m) WW/DJ

ACC NR: AP6002633 SOURCE CODE: CZ/0032/65/015/002/0083/0091

AUTHOR: Pacher, J. (Engineer)

ORG: Lentnany Automobile Plants (Automobilove zavody Lentnany)

TITLE: Designing plain bearings for automotive engines

SOURCE: Strojirenstvi, v. 15, no. 2, 1965, 83-91

TOPIC TAGS: antifriction bearing, mechanical engineering, vehicle engine

ABSTRACT: The first part of the article deals with practical calculations of plain bearings for automotive engines; but, since the formulas are generalized, they can be applied to many other machines where bearings operate under conditions comparable with those of automotive engines. All the equations in the first part are presented in the form required by practical designers, without thorough theoretical explanations. The second part discusses in detail the theoretical justification of the method; the author also evaluates the reliability of the method, taking into account several simplifying assumptions made in the calculations. This work was presented by Engr. J. Vins. Orig. art. has: 11 figures, 11 formulas, 2 tables. [JPRS]

SUB CODE: 13 / SUBM DATE: none / OTH REF: 003

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15235* Cylinder Head Failures. Poruchy hlav válců. (Czech.) Jar. Pacher, *Strojírenství*, v. 5, no. 3, Mar. 1955, p. 194-198.

Effect of cooling rate on stresses and differences between thermal stressing of cylinder heads in gasoline and diesel engines; methods of determining stresses in castings; advantages of tensometric measurement; design changes by which cracking of cylinder heads was eliminated. Graphs, diagrams, table. 3 ref.

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PACHER, Jaroslav

Encyklopedie automobilu a traktoru. Zkraceny vytak prednasek Jana Petraka. (Encyclopedia of Automobiles and Tractors; Abridged Lectures by Jan Petrak; a university textbook. 1st ed. illus., bibl.) For the students of the Faculty of Mechanical Engineering and the Faculty of Economic Engineering, Prague, SNTL, 1957. 467 p.

Bibliograficky katalog, CSR, Ceske knihy, No. 36. 15 Oct 57. p. 790.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHES, A. I.

PACHES, A. I. -- "The Significance of the Paramecium Reaction in the Diagnosis of Cancer." Kirgiz State Medical Inst. Clinic of Faculty Surgery. Frunze, 1955. (Dissertation for the Degree of Candidate in Medical Sciences)

SO: Knizhnaya Letopis', No 1, 1956

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PACHES, A.I.

Significance of Paramecium reaction in the diagnosis of cancer.
Vop. onk. 2 no.1:71-77 '56 (MIRA 9:4)

1. Iz kliniki Fakul'tetskoy khirurgii (zav.-prof. A.N. Kruglov)
Kirgizskogo gosudarstvennogo meditsinskogo instituta g. Frunze.
(NEOPLASMS, diag.
Paramecium reaction)
(CILIATA
paramecium reaction in Diag. of cancer of various locations)

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PACHES, A.I.

Biological diagnosis of cancer. Lab.delo 2 no. 2:21-23 Mr-Ap '56.
(MLRA 9:10)
1. Iz kliniki fakul'tetskoy khirurgii (zav. - professor A.N.Kruglov) Kirgizskogo meditsinskogo instituta, g.Frunze.
(CANCER) (DIAGNOSIS)

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PACHES, A.I.

Myxoma of the rib degenerating into myxosarcoma. Vop.onk. 6 no.2:95-97 F '60. (MIRA 14:2)
(RIBS—TUMORS)

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHES, A.I.; KHAMITOV, S.Kh.

Combination of histogenetically different malignant tumors of the brain and parotid gland. Vop.onk. 7 no.5:85-88 '61. (MIRA 15:1)

1. Iz kafedry fakul'tetskoy khirurgii (zav. - prof. Z.I. Igemberdiyev) i sudebnoy meditsiny (zav. - kand.med.nauk S.Kh. Khamitov) Kirgizskogo gosudarstvennogo meditsinskogo instituta (dir. - F.N. Nurgaziyeva).

(BRAIN—CANCER) (PAROTID GLANDS—CANCER)

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHES, A.I., kand.med.nauk

Results of the work of the All-Union Conference on Problems in the Organization of Oncological Care. Zdrav. Tadzh. 8 no.1:57 '61. (MIRA 14:3)

(CANCER--CONGRESSES)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHES, A.I., kand.med.nauk

Chief problem in the organization of measures against cancer in the Tajik S.S.R. Zdrav. Tadzh. 8 no.3:3-6 My-Je '61. (MIRA 14:6)

(TAJIKISTAN--CANCER)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHES, A.I.

Diagnostic value of detecting ether-soluble bilirubin in the blood serum in cancer of the pancreas and Vater's ampulla. Lab. delo 8 no.3:29-32 Mr '62. (MIRA 15:5)

1. Klinika fakul'tetskoy khirurgii Kirgizskogo meditsinskogo instituta i klinicheskaya laboratoriya Nauchno-issledovatel'skogo instituta onkologii i radiologii, Frunze.
(BILIRUBIN) (PANCREAS—CANCER) (DUODENUM—CANCER)

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHES, A.I., kand.med.nauk; CHURNOSOVA, L.I.

Medical tactics in melanoma. Zdrav. Tadzh. 9 no.1:36-37 Ja-F '62. (MIRA 15:4)

1. Iz respublikanskogo onkologicheskogo dispansera (glavnyy vrach - K.I.Savina).

(MELANOMA)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHES, A.I.

Radiotherapy of tumors of the parotid gland. Med. rad. 8 no.10:31-37 O '63. (MIRA 17:6)

1. Iz 1-go khirurgicheskogo otdeleniya (zav. - doktor meditsinskikh nauk B.Ye. Peterson) Instituta eksperimental'noy i klinicheskoy onkologii AMN SSSR i Tadzhikskogo meditsinskogo instituta.

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHES, A.I. (Dushanbe, ul. Ayni, 50/51, kv. 72)

Late results and combined treatment of the so called mixed tumors of the parotid glands. Vopr. onk. 9 no.4:43-48 '63. (MIRA 17:9)

1. Khirurgicheskoye otdeleniye (zav. - doktor med. nauk B.Ye. Peterson) Instituta eksperimental'noy i klinicheskoy onkologii AMN SSSR (dir. - deystvitel'nyy chlen AMN SSSR prof. N.N.Blokhin) i Tadzhikskiy meditsinskiy institut (rektor - zasluzhennyy deyatel' nauki Z.P.Khodzhayev).

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHES, A.I., kand. med. nauk

Clinical aspect and combined treatment of so-called mixed tumors of the parotid glands. Stomatologiia 42 no.2:51-54 Mr-Ap'63 (MIRA 17:3)

1. Iz Kirgizskogo nauchno-issledovatel'skogo instituta onkologii i radiologii (direktor - prof. A.I.Sayenko).

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHES, A.I. (Dushanbe, Ayni, 50/51, kv.72)

Surgical treatment of malignant neoplasms of the parotid gland.
Vop. onk. 10 no.6:36-42 '64. (MIRA 18:3)

1. 1-ye khirurgicheskoye otdeleniye (zav. - doktor med.nauk B.Ye. Peterson) Instituta eksperimental'noy i klinicheskoy onkologii AMN SSSR (dir. - deystvitel'nyy chlen AMN SSSR prof. N.N.Blokhin) i Tadzhikskiy meditsinskiy institut (rektor - zasluzhennyy deyatel' nauki Tadzhikskoy SSR Z.P.Khodzhayev).

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHES, A.I.

Teaching oncology in medical institutes. Vop. onk. 11 no.9:71-74 '65. (MIRA 18:9)

1. Tadzhikskiy meditsinskiy institut (rektor - Z.P.Khodzhayev).

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PACHES, J, BELOV, K.P., GORIAGA,A.N.

"Thernodynamic; Investigation of Ferromagnetics Substances in the Region of the Curie Temperature" Moscow

Conference on Physics of Magnetic Phenomena,
May 1956, Sverdlovsk, USSR

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PACHES, V. [Paces, V.], dotsent (Praga)

Allergy in urology. Urologiia no.6:21-24'62. (MIRA 16:7)
(ALLERGY) (UROLOGY)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

Paches, Ya.

AUTHOR: Belov, K. and Paches, Ya. 107

TITLE: Temperature characteristic of spontaneous magnetisation in alloys in the Curie-point temperature range. (O temperaturnom khode zamoproizvol'noy namagnichennosti v splavakh v oblasti tochki kyuri.)

PERIODICAL: "Fizika Metallov i Metallovedenie," (Physics of Metals and Metallurgy), 1957, Vol. [redacted] No.1 (10), pp. 48-53, (U.S.S.R.)

ABSTRACT: The curves of the temperature dependence of spontaneous magnetisation in the Curie-point range for nickel and some nickel alloys were determined by three differing methods. It was established that the so-called "tails" in the curves of spontaneous magnetisation in the Curie point temperature range are particularly large in these alloys. Their shape and length is strongly dependent on the heat treatment and concentration of the element which is alloyed with the nickel. On the basis of analysis of the experimental material on magnetic and electric phenomena in nickel alloys a more accurate method of determination of the Curie temperature is proposed. To obtain reliable results on the temperature characteristics of the spontaneous magnetisation near the Curie point the Curie point was determined for each specimen by the following three methods: the spontaneous magnetisation I_s was determined from the curves "galvano-magnetic effect -square value of the magnetisation", which were recorded for the specimens under

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PACHEV, Angel

Problems in physics, related to industrial practice. Mat i fiz Bulg 5 no.4:55 Jl-Ag '62.

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PACHEV, Iliia, inzh.

Some contradictions between the standards for leather and those for footwear. Ratsionalizatsiia 13 no.4:34 '63.

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PACHEV, P.G.

The sanatorium and health resort system in Bulgaria. Vop. kur., fizioter. i lech. fiz. kul't. 22 no.1:66-69 Ja-F '57
(MLRA 10:4)

1. Nachal'nik Sanatorno-kurortnogo upravleniya Ministerstva zdravookhraneniya i sotsial'nogo obespecheniya Narodnoy Respubliki Bolgarii, Sofiya.
(BULGARIA--HEALTH RESORTS, WATERING PLACES, ETC.)

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RUSAKIYEV, M. [Rusakiev, M.]; KHRISTOVA, T.; ANDONOV, P.; PRODROMOV, A.; PETKOV, I.; GRYNCHAROV, K. [Gruncharov, K.]; PACHEV, S.

Studies of the serum of some migrant birds in the presence of antibodies neutralizing the West Nile virus. Trudy epidemiol mikrobiol 8:139-141 '61 [publ.'62].

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PACHEV, 1ST.

Sofia, Khigiena, Vol 8, No 6, Nov-Dec 63.

#240

1. "All to the Aid of War - for the Health of Men," V. [illegible] and M. ATANASOV, (no affiliation given); pp 1-4.

2. "Foci of Trichinosis in the Varna Region," T. ALEXIEV, Parasitologist at the Okrug SES (Sanitary-Epidemiological Station) in Varna and St. [illegible], Sanitary Epidemiological Station) in Varna and St. [illegible], Scientific Worker at the MIP (Higher Institute of Epidemiology, Microbiology, Statistics and Hygiene) in Sofia; pp 5-9.

3. "The Geographical Milieu of the Natural Foci of Zoonotic Diseases in the Kardzhali District," D. MARKOV, L. IVANOV and [illegible], Okrug SES in Kardzhali; and [illegible], Scientific Worker at the [illegible] Institute of Epidemiology and Microbiology in Sofia; pp 10-16.

4. "Zoonotic Diseases in Blagoevgrad Okrug," P. [illegible] and K. [illegible], (no affiliation given); pp 17-22.

5. "Natural Foci of Tick Encephalitis in the Eastern Part of Stara Planina Mountains," P. ATANASOV, M. PENCHEVA, T. [illegible], Sr. Scientific Worker, and N. GEORGIADOV, (no affiliation given); pp 23-25.

6. "Q-Fever in Cattle and Sheep - The Incidence of Q-Fever among the Livestock Workers of the Plant Combine Workers in Dimitrovo (Okrug), N. MANASIEVA and A. [illegible] of the Plovdiv Okrug SES (Sanitary Epidemiological Station); pp 26-28.

7. "On the Epidemiology of Mandibular Fever in Thrace," A. [illegible] and [illegible] (transcription) of the Internal Diseases Department of the Municipal Hospital in Pazardzhik (Petrovich, orthodontic [illegible] Hospital in Plovdiv (Petrovich orthodontic [illegible]); pp 29-31.

8. "Serological Research on Some Rickettsia Kinds of Ixodoxenus," B. MARKOVSKI of the Higher Institute of Health Protection in Sofia, and N. MARKOV of the [illegible] Institute of Epidemiology and Microbiology in Sofia; pp 33-35.

9. "On the Incidence of Leptospirosis Among the Domestic Animals and the Population in Varna Okrug," Y. [illegible] and E. [illegible] of the Varna Okrug Sanitary Epidemiological Station (Okrug Sanitary Epidemiological Station (Okrug Sanitary-Epidemiological Station Varna); pp 36-41.

- 1/2 -

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VELIKOV, N.; PACHEV, T.

Private use of public funds in socialism, and its nature.
Trud tseni 5 no. 9: 1-13 '63.

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PACHEVA, I.

Impressions from some physical institutes in Poland. Fiz mat spisanie BAN 5 no.2:151-152 '62.

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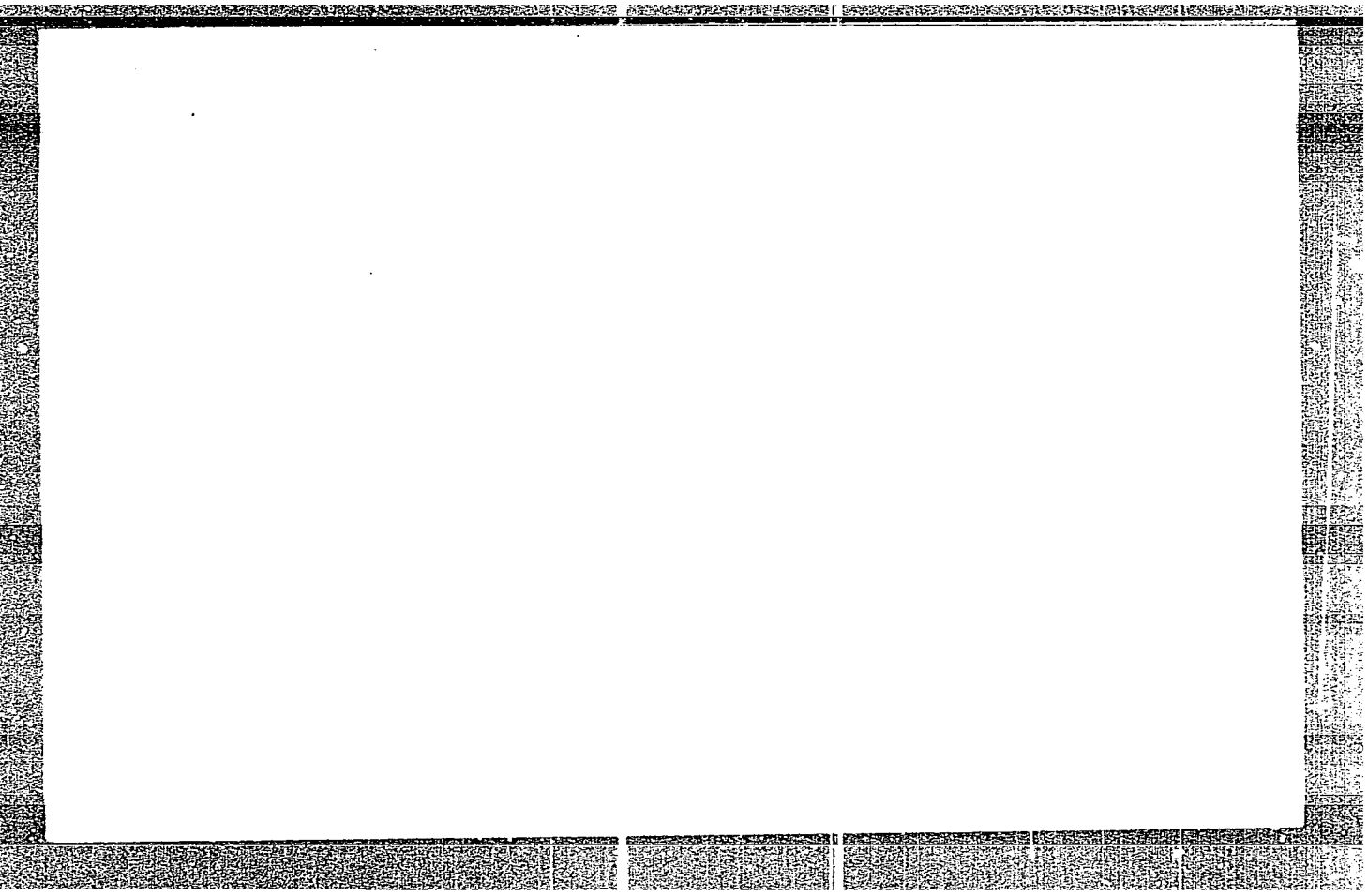

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PACHEVA, I.

Spectral determination of chromium and manganese in soils. Izv fiz atom BAN 11 no.1/2:57-65 '63.

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BULGARIA/Optics - Instruments for Optical Analysis K-9

Abs Jour : Ref Zhur - Fizika, No 10, 1958, No 24156

Author : Pachova I., Vasilova N.
Inst : Not Given
Title : Investigation of an Arc Discharge at Various Pressures.

Orig Pub : Izv. Bŭlg. AN Otd. fiz.-matem. i techn. i. Ser. fiz., 1957, 6, 155-164

Abstract : Report of the results of an investigation of a d-c arc in the air at pressures from 4 to 760 mm mercury. The investigations were carried out to establish the influence of certain elementary processes in the discharge on the intensity of the spectral lines. The results have shown the following: 1. The pressure dependence of the relative intensity of two lines in the presence of strong reabsorption in one of these does not coincide with the dependence previously obtained by O.F. Semenova and V.V. Kokhanenko (Izv. An SSSR, ser. fiz. 1950, 6, 727). An explanation for this discrepancy must be sought in the dependence of reabsorption

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PACHEVA, I.

Fifteenth Conference on Spectroscopy at Minsk (U.S.S.R.). Fiz mat spissnie BAN 7 no.1:65-66 '64.

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S/048/61/025/001/020/031
B029/B060

24.6700

AUTHORS: Kaliteyevskiy, N. I., Chayka, M. P., Pacheva, I. Kh., Fradkin, E. Ye.

TITLE: Nuclear moments of odd isotopes of gadolinium

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, v. 25, no. 1, 1961, 111-114

TEXT: This is a report of studies which have been described in a previous preliminary communication. Several data have now been better defined by additional measurements and by improving the calculation method. The authors used a photoelectric spectrometer and a Fabry - Perot spectrometer to study the hyperfine structure of the three lines of GdI:
λ = 5015 A ($z^{11}G_9 - a^{11}F_8$); λ = 5103 A ($z^{11}G_8 - a^{11}F_7$) and
λ = 4743 A ($y^{11}F_3 - a^{11}F_4$). The measurements were made on separated isotopes of gadolinium with a high-purity degree (Gd^{155} - 97.3%,

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B029/B060

Nuclear moments of odd isotopes of...

Gd^{157} - 91.4%). The components of the fine structure of gadolinium lines are so close to one another (15 to 20 mK) that the fine structure under the given experimental conditions could not be resolved. It can be resolved only if one presupposes four sublevels of the hyperfine structure of the investigated energy levels of Gd^{157} and Gd^{155}. This unequivocally yields for both isotopes the spin 3/2. The position of the components of the hyperfine structure was determined on the basis of the splitting of the line structure taking account of all superimposing isotopes belonging to other elements. The calculations were carried out for the four intensive diagonal components of the line investigated. The three independent intervals $\sigma(1\text{-}2)$, $\sigma(1\text{-}3)$, $\sigma(1\text{-}4)$ were experimentally determined for every line of the two isotopes. The ratio of the magnetic moments of Gd^{155} and Gd^{157} was established by the direct combination of the experimental data:

$$\frac{\mu_{155}}{\mu_{157}} = \frac{\sigma_{155}(1\text{-}2) - \sigma_{155}(1\text{-}3) + \sigma_{155}(1\text{-}4)}{\sigma_{157}(1\text{-}2) - \sigma_{157}(1\text{-}3) + \sigma_{157}(1\text{-}4)} .$$

The ratio of the quadrupole moments of Gd^{155} and Gd^{157} can be calculated with a good accuracy by

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Nuclear moments of odd isotopes of...

Casimir's formula. The results of calculations carried out by two different methods are given in Table 1. The value of the ratio of magnetic moments thus found is in good agreement with more recent and more accurate measurements of this quantity by the method of the paramagnetic resonance. The value $Q_{155}/Q_{157} = 0.8 \pm 0.1$ found by the authors contradicts, however, the spectroscopic measurements by O. R. Speck, who found $Q_{155} > Q_{157}$. Therefore, it is of interest to compare the data found by the authors with results obtained by other methods. The most accurate method is evidently that by V. Ramsak et al. (Ref. 10). Like the authors of the present article, those authors also found $Q_{155} < Q_{157}$, but a difference appears in the qualitative evaluation of Q_{155}/Q_{157}. For the calculation of the absolute values of the magnetic moment and the quadrupole moment from spectrometric measurements it is necessary to estimate the matrix elements $\langle H(0) \rangle$ and $\left\langle \frac{\partial^2 u}{\partial z^2}(0) \right\rangle_J$, which is, however, possible only by approximation. The

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Nuclear moments of odd isotopes of...

authors found $Q_{155} = 1.45 \cdot 10^{-24}$ cm^2 and $Q_{157} = 1.8 \cdot 10^{-24}$ cm^2. The deformation parameters were then estimated from the values of the intrinsic quadrupole moments: $\delta_{155} = 0.27$ and $\delta_{157} = 0.33$. Finally, for the gyromagnetic ratio the authors found $g_{K\ 155}/g_{K\ 157} = 0.9$, which is in good agreement with experimental data published by other authors. V. S. Zolotarev is thanked for having supplied the pure isotopes and L. K. Peker for his discussions. The article under consideration is the reproduction of a lecture delivered at the 10th All-Union Conference on Nuclear Spectroscopy, which took place in Moscow from January 19 to 27, 1960. There are 1 figure, 2 tables, and 12 references: 5 Soviet-bloc and 6 non-Soviet-bloc.

ASSOCIATION: Nauchno-issledovatel'skiy fizicheskiy institut Leningradskogo gos. universiteta im. A. A. Zhdanova (Scientific Research Institute of Physics of Leningrad State University imeni A. A. Zhdanov)

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Nuclear moments of odd isotopes of...

Legend to Table 1: Ratios of magnetic and quadrupole moments of odd gadolinium isotopes

ratio		λ = 5015 A	λ = 5103 A	λ = 4743 A	mean value
$\frac{\mu_{155}}{\mu_{157}}$		0.80±0.02	0.77±0.01	0.79±0.02	0.78±0.03
$\frac{Q_{155}}{Q_{157}}$	1st method	0.76±0.04	0.82±0.02	0.88±0.05	0.8 ±0.1
	2nd method	0.76±0.03	0.82±0.05	0.86±0.07	0.8 ±0.1

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21 (1)

AUTHORS: Kaliteyevskiy, N. I., Chayka, M. P., Pacheva, I. Kh., Fradkin, E. Ye. SOV/56-37-3-57/62

TITLE: Nuclear Moments of the Odd Gadolinium Isotopes

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 37, Nr 3(9), pp 882 - 884 (USSR)

ABSTRACT: The present "Letter to the Editor" contains an abundance of details partly taken from the authors' own investigations and partly from other publications. In an earlier paper (Ref 1) the hyperfine structure of the 3 lines of Gd I: 5015, 5103, and 5251 Å was investigated by means of a photoelectric spectrometer. The investigations were carried out on the very pure isotopes Gd^{155}(97.3%) and Gd^{157}(91.4%). Both isotopes have the spin I = 3/2. The magnetic moments: $\mu_{155} = -0.32\pm0.04$, $\mu_{157} = -0.40\pm0.04$. The quadrupole moments: $Q_{155} = 1.6\cdot10^{-24}cm^2$, $Q_{157} = 2\cdot10^{-24}cm^2$; these values are nearly double as high as those found by Speck. The internal quadrupole moments $Q_o^{155} = 8\cdot10^{-24}cm^2$ and $Q_o^{157} = 10\cdot10^{-24}cm^2$ agree as to the order

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHEVA, I. Kh., Cand Phys-Math Sci -- (diss) "Spectroscopic determination of nuclear moments of the odd isotopes of gadolinium." Leningrad, 1960. 11 pp; (Leningrad Order of Lenin State Univ im A. A. Zhdanov, Faculty of Physics, Chair of Optics); 200 copies; price not given; (KL, 30-60, 136)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

68308

SOV/51-8-1-3/40

24.6700

AUTHORS: Kaliteyevskiy, N.I., Chayka, M.P., Pacheva, I.Kh. and Fradkin, E.Ye.

TITLE: Spectroscopic Determination of Nuclear Moments of Odd Gadolinium Isotopes

PERIODICAL: Optika i spektroskopiya, 1960, Vol 8, Nr 1, pp 13-22 (USSR)

ABSTRACT: The authors investigated photoelectrically the hyperfine structure (h.f.s.) of the 5015.04 Å ($z^{\prime\prime}G_9 - a^{\prime\prime}F^o_8$), 5103.45 Å ($z^{\prime}G_8 - a^{\prime\prime}F^o_7$), 5251.18 Å ($z^{\prime\prime}G_8 - a^{\prime\prime}F^o_8$) lines of separated gadolinium isotopes and natural gadolinium. The purpose of the investigation was to determine the quadrupole moments of Gd^{155} and Gd^{157} and to confirm optically the spin of these nuclei. The authors used a photoelectric spectrometer with a Fabry--Perot interferometer (Refs 7, 8) and a photomultiplier FEU-17 with a good signal-to-noise ratio at low light intensities. The spectrum of gadolinium (used in the form of Gd_2O_3) was excited in an argon-filled discharge tube with a hollow cathode. In order to minimize the Doppler broadening, the hollow cathode was cooled with liquid air and the discharge current was kept below 30 mA (the line-width rose linearly with current, Fig 1). Under such conditions the line width corresponded to that in a gas at 250°K. Even then it was not possible to resolve all the h.f.s.

Card 1/3

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Spectroscopic Determination of Nuclear Moments of Odd Gadolinium Isotopes

components. Gadolinium samples had compositions shown in Table 1: Nr 1 had 97.3% Gd^{155}, Nr 2 had 91.4% Gd^{157}, Nr 3 (natural Gd) had 0.2% Gd^{152}, 2.86% Gd^{154}, 15.61% Gd^{155}, 20.59% Gd^{156}, 16.42% Gd^{157}, 23.45% Gd^{158}, 20.87% Gd^{160}. Some of the results obtained are given in Figs 2 and 3 and in Table 2. Fig 2 shows the relative positions of the h.f.s. components of Gd^{157} and of Gd^{160}, Gd^{158} and Gd^{156} in the case of the 5015 Å line. Fig 3 shows the analysis of the Gd^{157} 5015 Å (a) and 5103 Å (δ) lines into their h.f.s. components. Table 2 lists the values of the hyperfine separation A (in millikaysers) and of calculated and quadrupole moments Q (in $10^{-24}cm^2$). Fig 4 shows the transitions of the three lines investigated in schematic form. The authors found that gadolinium lines can be analysed into their components only if four components are assumed for both Gd^{157} and Gd^{155}. This means that the spin of both these nuclides is I = 3/2, in agreement with Low (Ref 5), Manenkov and Prokhorov (Ref 6). Depending on the assumptions made, the authors obtained the following values for the quadrupole moments: either

$Q_{157} = 1.6$ and $Q_{155} = 1.2 \times 10^{-24} cm^2$,

or

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Spectroscopic Determination of Nuclear Moments of Odd Gadolinium Isotopes

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$Q_{157} = 2$ and $Q_{155} = 1.6 \times 10^{-24}$ cm^2.

The magnetic moments were also found:

$\mu_{157} = -0.40 \pm 0.04$ n.m. and $\mu_{155} = -0.32 \pm 0.04$ n.m.

Consequently the moment ratios were:

$Q_{155}/Q_{157} = 0.8 \pm 0.1$, $\mu_{155}/\mu_{157} = 0.79 \pm 0.02$.

The deformation parameters δ of the two nuclides were found to be $\delta_{157} = 0.37$ and $\delta_{155} = 0.31$, and their ratio was $\delta_{155}/\delta_{157} = 0.8$. The gyromagnetic ratios for the internal (g_k) and the collective (g_R) motion were also determined. They were $g_{k157} = -0.9$, $g_{k155} = -0.8$, $g_{R157} = g_{R155} = 0.7$; $g_{k155}/g_{k157} = 0.9 \pm 0.1$. Acknowledgments are made to V.S. Zolotarev for supplying separated gadolinium isotopes and to L.K. Peker for his advice. There are 4 figures, 2 tables and 21 references, 5 of which are Soviet, 10 English, 4 German, 1 Swiss and 1 Danish.

Card 3/3

SUBMITTED: June 19, 1959

4

86-00513R0

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHEVA, L.

"A study of arc discharges at various pressures."

IZVESTIIA. SERIIA FIZICHESKA, Sofiia, Bulgaria, Vol. 6, Jan./Dec. 1956 (published 1957).

Monthly List of East European Accessions Index (EEAI), The Library of Congress, Volume 8, No. 8, August 1959.

Unclassified

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

GOLOMB, L.M. [Holomb, L.M.], kand.tekhn.nauk; PACHEVA, N.A. [Pacheva, N.O.]

Experimental testing of some methods for determining the chemical bonds of active dyes with polyamide fibers. Leh.prom. no.2:47-51 Ap-Je '65. (MIRA 18:10)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

GOLOMB, L.M. [Holomb, L.M.]; PACHEVA, N.A. [Pacheva, N.O.]; MITYAKINSKIY, V.I. [Mitiakins'kyi, V.I.]

Laboratory apparatus for dyeing synthetic fibers under pressure. Leh. prom. no.3:66-67 Jl-S '65. (MIRA 18:9)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

DOKUNIKHIN, N.S.; FAYN, V.Ya.; PACHEVA, N.A.

4-Methyl-1-(alkyl, aryl)-aminoanthraquinones. Zhur.prikl.khim. 38 no.11:2619-2621 N '65. (MIRA 18:12)

1. Submitted November 13, 1963.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

S/081/62/000/006/003/117
B166/B101

AUTHOR: Pacheva, Y. Khr.

TITLE: Isotope shift in the spectrum of gadolinium

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 6, 1962, 6, abstract 6B15 (Izv. Fiz. in-t s ANEB, v. 9, no. 1, 1961, 39-104)

TEXT: The results of studies of the isotopic structure of the spectral lines of Gd in the yellow-green region of the spectrum are given. The light source was a hollow cathode cooled by liquid air. The isotopic structure of the spectral lines was observed with the aid of a Fabry-Perot standard with a seven-layer dielectric coating. Two methods were used to record the spectrum: the photographic and the photoelectric method. The use of the photoelectric method of recording and the presence of separate odd isotopes of Gd of a high degree of enrichment (Gd^{155} 97.3% and Gd^{157} 91.4%) made it possible to determine the isotope shift of the odd components Gd^{155} and Gd^{157}. The isotopic structure of several lines which have already been studied was observed, and, in addition, six new lines were observed in the Gd spectrum. The error in determining isotope shifts is evaluated as

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Isotope shift in the spectrum of...

S/081/62/000/006/003/117
B166/B101

$\pm$ $1 \cdot 10^{-3}$ cm^{-1} for the even components, and as $\sim \pm$ $2 \cdot 10^{-3}$ cm^{-1} for components corresponding to the odd isotopes. [Abstracter's note: Complete translation]

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

S/058/62/000/004/042/160
A058/A101

AUTHOR: Pacheva, Y. Khr.

TITLE: Isotopic shift in the gadolinium spectrum

PERIODICAL: Referativnyy zhurnal, Fizika, no. 4, 1962, 11, abstract 4V72 (Izotopno otmestvane v spek'ra na gadoliniya. "Izv. Fzi. in-t s ANYeB", 1961, v. 9, no. 1, 93-104, Bulgarian; Russian and English summaries)

TEXT: The isotopic structure of the spectral lines of gadolinium was investigated in the yellow-green region of the spectrum. The light source was a gas-discharge tube with a hollow cathode cooled by liquid air. The isotopic structure of the spectral lines was observed with the aid of a Fabry-Perot standard with a 7-layer dielectric covering and a mirror reflection factor of 92%. A photographic and a photoelectric method were used for recording the spectrum. Utilization of the photoelectric recording method and the presence of separate, odd, highly enriched Gd isotopes (Gd^{155} - 97.3% and Gd^{157} - 91.4%) made it possible to determine the isotopic shift of the odd components Gd^{155} and Gd^{157}. The author observed the isotopic structure of some lines investigated

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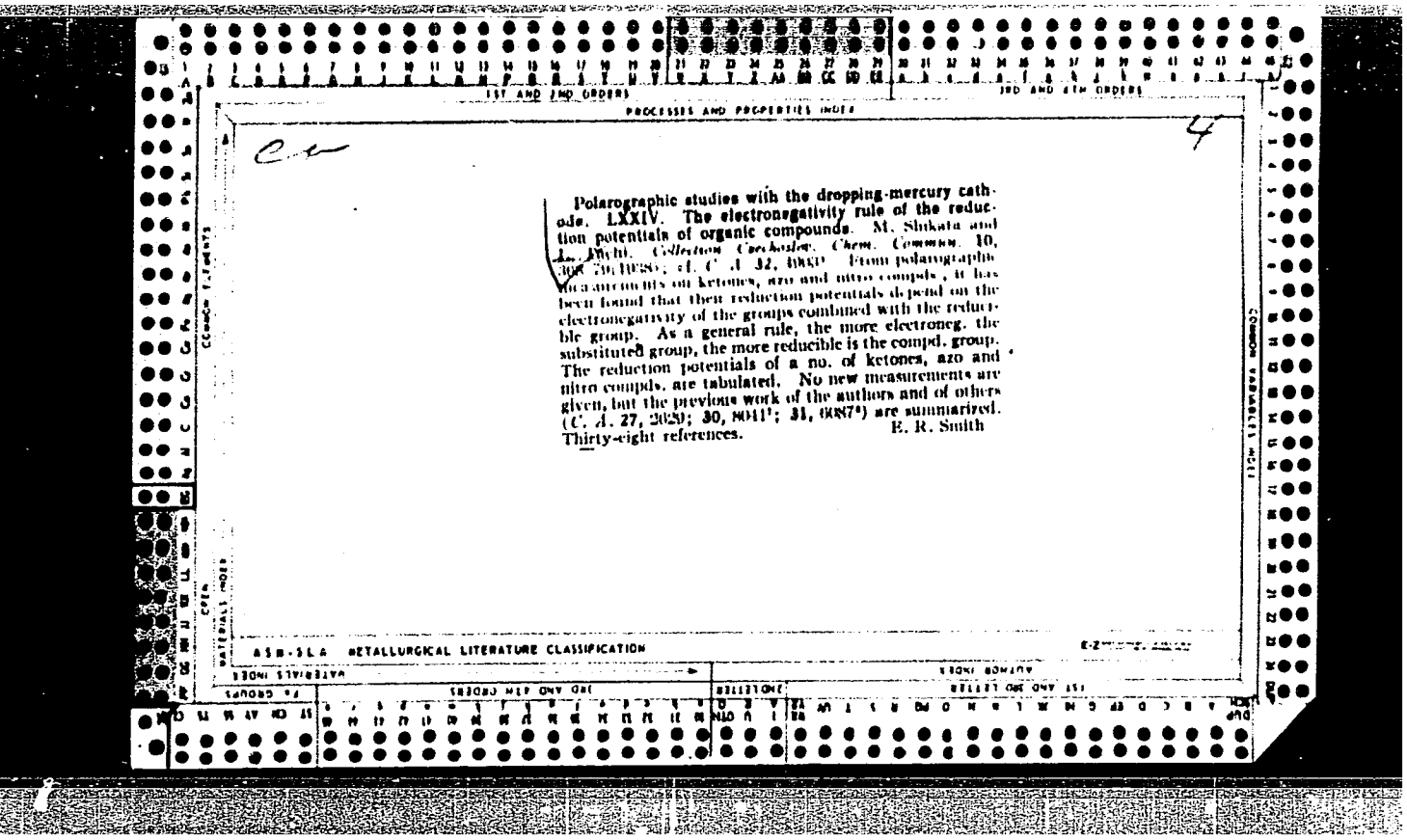

PROCESSES AND PROPERTIES INDEX

4

Polarographic studies with the dropping-mercury cathode. LXXIV. The electronegativity rule of the reduction potentials of organic compounds. M. Shikata and [illegible] Tachi. *Collection Czechoslov. Chem. Commun.* 10, [illegible]; cf. *C. A.* 32, 8863[1]. From polarographic measurements on ketones, azo and nitro compds., it has been found that their reduction potentials depend on the electronegativity of the groups combined with the reducible group. As a general rule, the more electroneg. the substituted group, the more reducible is the compd. group. The reduction potentials of a no. of ketones, azo and nitro compds. are tabulated. No new measurements are given, but the previous work of the authors and of others (*C. A.* 27, 2059; 30, 8041[1]; 31, 6087[4]) are summarized. E. R. Smith
Thirty-eight references.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHIKIN, V. I.

PACHIKIN, V. I. -- "The Agricultural Engineering of Fodder Beets under the Conditions of Irrigated Agriculture in the Dry-Steppe Zone of Alma-Ata Oblast." Kazakh Affiliate, All-Union Order of Lenin Academy of Agricultural Sciences imeni V. I. Lenin. Institute of Fodder and Pastures. Alma-Ata, 1955. (Dissertation for the Degree of Candidate in Agricultural Sciences.)

So; Knizhaya Letopis' No 3, 1956

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

USSR / Cultivated Plants. Forage Crops. M-5

Abs Jour: Ref Zhur-Biol., 1958, No 16, 73027.

Author : Pachikin, V. I.
Inst : Scientific-Research Institute of Fodders and Pastures.
Title : Fodder Beets in the Irrigated Agriculture of Alma-Atinskaya Oblast.

Orig Pub: Tr. N.-i. in-ta kormov i pastbishch, 1957, 1, 168-179.

Abstract: In 3-year investigations carried out at the "Kzyl-Tu" Kolkhoz, Alma-Atinskaya Oblast, it was established that the vest varieties of fodder beets on the irrigated lands of the dry zone are "Ideal Kirshe" and "Belaya sakharnaya". The vegetation period of these varieties is longer than in others, therefore they accumulate more dry matter. The best

Card 1/2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHIKINA, L.I.

Soils in the Talas-Assa interfluve. Izv. AN Kazakh. SSR. Ser. biol. nauk 2 no.6:9-23 N-D '64. (MIRA 18:3)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHIKINA, Lyubov' Ivanovna; RUBINSHTEYN, Mikhail Issakovich; STOROZHENKO, D.M., otv.red.vypuska; BEZSONOV, A.I., otv.red.; BOROVSKIY, V.M., red.; SOKOLOV, A.A., red.; SOKOLOV, S.I., red.; USPANOV, U.U., red.; POGOZHEV, A.S., red.; ROROKINA, Z.P., tekhn.red.

[Soils of Kazakhstan in 16 volumes] Pochvy Kazakhskoi SSR v 16 vypuskakh. Alma-Ata. Vol.2. [Soils of Kokchetav Province] Pochvy Kokchetavskoi oblasti. 1960. 135 p. (MIRA 13:8)

1. Akademiya nauk Kazakhskoy SSR, Alma-Ata. Institut pochvovedeniya.
(Kokchetav Province--Soils)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHIN, V. Kh.

57

PHASE I BOOK EXPLOITATION SOV/5460

Leningradskiy metallicheskiy zavod. Otdel tekhnicheskoy informatsii.

Nekotoryye voprosy tekhnologii proizvodstva turbin (Certain Problems in the Manufacture of Turbines) Moscow, Mashgiz, 1960. 398 p. (Series: Its: Trudy, vyp. 7) Errata slip inserted. 2,100 copies printed.

Sponsoring Agency: RSFSR. Sovet narodnogo khozyaystva Leningradskogo ekonomicheskogo administrativnogo rayona, Upravleniye tyazhelogo mashinostroyeniya, and Leningradskiy dvazhdy ordena Lenina metallicheskiy zavod. Otdel tekhnicheskoy informatsii.

Ed. (Title page): G. A. Drobilko; Editorial Board: Resp. Ed.: G. A. Drobilko, B. A. Glebov, A. M. Mayzel', and M. Kh. Mernik; Tech. Ed.: A. I. Kontorovich; Managing Ed. for Literature on Machine-Building Technology: Ye. P. Naumov, Engineer, Leningrad Department, Mashgiz.

PURPOSE: This collection of articles is intended for technical personnel in turbine plants, institutes, planning organizations, as well as for production innovators.

Card ~~1/12~~

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

57

Certain Problems (Cont.) SOV/5460

COVERAGE: The experience of the LMZ (Leningradskiy metallicheskiy zavod - Leningrad Metalworking Plant) in the manufacture of modern large-capacity turbines is presented. Methods for the rationalization of basic manufacturing processes and for the mechanization and automation of manual operations are given. Descriptions of attachments and tools designed by LMZ for improving labor productivity and product quality are provided, and advanced inspection methods discussed. References accompany some articles. No personalities are mentioned. There are 26 references: 25 Soviet and 1 English.

TABLE OF CONTENTS:

Foreword 3

I. NEW PROCESSING METHODS IN MACHINING AND ASSEMBLY

Gamze, Z. M. [Engineer]. The Organization, Methods, and Trends in Efforts for Improving the Easy Manufacturability of Designs for Large Hydraulic Turbines 5

Card ~~2/12~~

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

S/114/60/000/003/005/008
E194/E355

AUTHORS: Libman, S.Ye., Pachin, V.Kh., Sternin, M.G. and El'tsufin, S.A., Engineers

TITLE: Casting of Nozzle Segments of Steam Turbine Type ВПТ-50 (VPT-50) by the Lost-wax Method

PERIODICAL: Energomashinostroyeniye, 1960, 6 No. 3, pp. 35 - 37

TEXT: The nozzles of the high-pressure cylinder of turbine VPT-50 operate on steam at a pressure of 90 atm. and a temperature of 535 °C. The nozzle boxes consist of four separate segments wherein milled blades were mounted on machined rims and welded. The parts were made of forgings of steel grade 15Х11МФ (15Kh11MF). After welding, the duct sizes were corrected by hand fitting. To economise in cost, labour and metal the Leningrad Metal Works introduced the lost-wax method of casting nozzle-box sections. The cast segments have the ends cut off and are then butt-welded together. The patterns for the blade holders are made of a mixture of 96% technical urea and 4% boric acid. Those for

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S/114/60/000/003/005/008
E194/E355

Casting of Nozzle Segments of Steam Turbine Type VPT-50 by the Lost-wax Method

the blades are made in a presstool with a mixture of 50% paraffin wax and 50% stearine. When the pattern has been assembled in the mould the urea part can be dissolved out with water.
The wax surface is treated with a ceramic paint consisting of 33% by weight hydrolised ethylsilicate and 67% marshalite, which is natural quartz dust. Six layers of ceramic paint are applied to the pattern. It is then dried, first in air and then in an ammonia chamber. Next, the wax pattern is melted out of the mould in hot water at 80 - 90 °C. The mould is then dried at 200 °C in an electric furnace. The mould is reinforced with sand and hardened by heating in an electric furnace for six hours.
The nozzle segments are cast of steel grade 15Х11МФЛ (15Kh11MFL) which is of sorbitic structure. After preliminary cleaning up the castings are heat-treated by a process which

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

S/114/60/000/003/005/008
E194/E355

Casting of Nozzle Segments of Steam Turbine Type VPT-50 by the Lost-wax Method

is described. Castings obviously defective are rejected by visual examination; final examination is by X-ray inspection and etching. Development experience that led to the use of the formulations and procedures given is briefly described. The shrinkage allowance is stated, and the method of controlled cooling used to avoid cracks is described.
By using casting instead of welding and milling, the weight of the normal segments on a turbine was reduced from 710 to 172 kg, the labour required was reduced from 1 730 to 840 man hours and the cost from 25 827 roubles to 13 387 roubles. There are 5 figures.

Card 3/3

CZECHOSLOVAKIA

Karol FACHINGER, Department of Zoology, Faculty of Natural Sciences, Comenius University (Katedra zoologie Prir. dovedeckej fakulty Univerzity Komenskeho,) Bratislava

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012

"Craniomorphology of the Red Field Mouse (Apodemus microps K-R)."

Bratislava, Biologia, Vol 18, No 2, 1963: pp 164-165.

Abstract: Craniometric specifically dental root data on this small mammal; comparisons with Apodemus agrarius, A. sylvaticus, and A. flavicolis. Table, drawing; 3 references: 2 Czech include author's thesis, German.

1/1

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHITAC, Mihail, ing.

Machine for manufacture of sheaths from spiral steel straps.
Constr Buc 16 no.768:3 26 Sep '64

1. Institute of Building Research and Construction Economics.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHKAYEV, I.Ya. (Minsk)

Harness all hidden potentials in providing better service to state and collective farm administration centers. Vest. sviazi 22 no.9:18-20 S '62. (MIRA 15:9)
(Collective farms--Communication systems)
(State farms--Communication systems)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHKAYEVA, N. A.

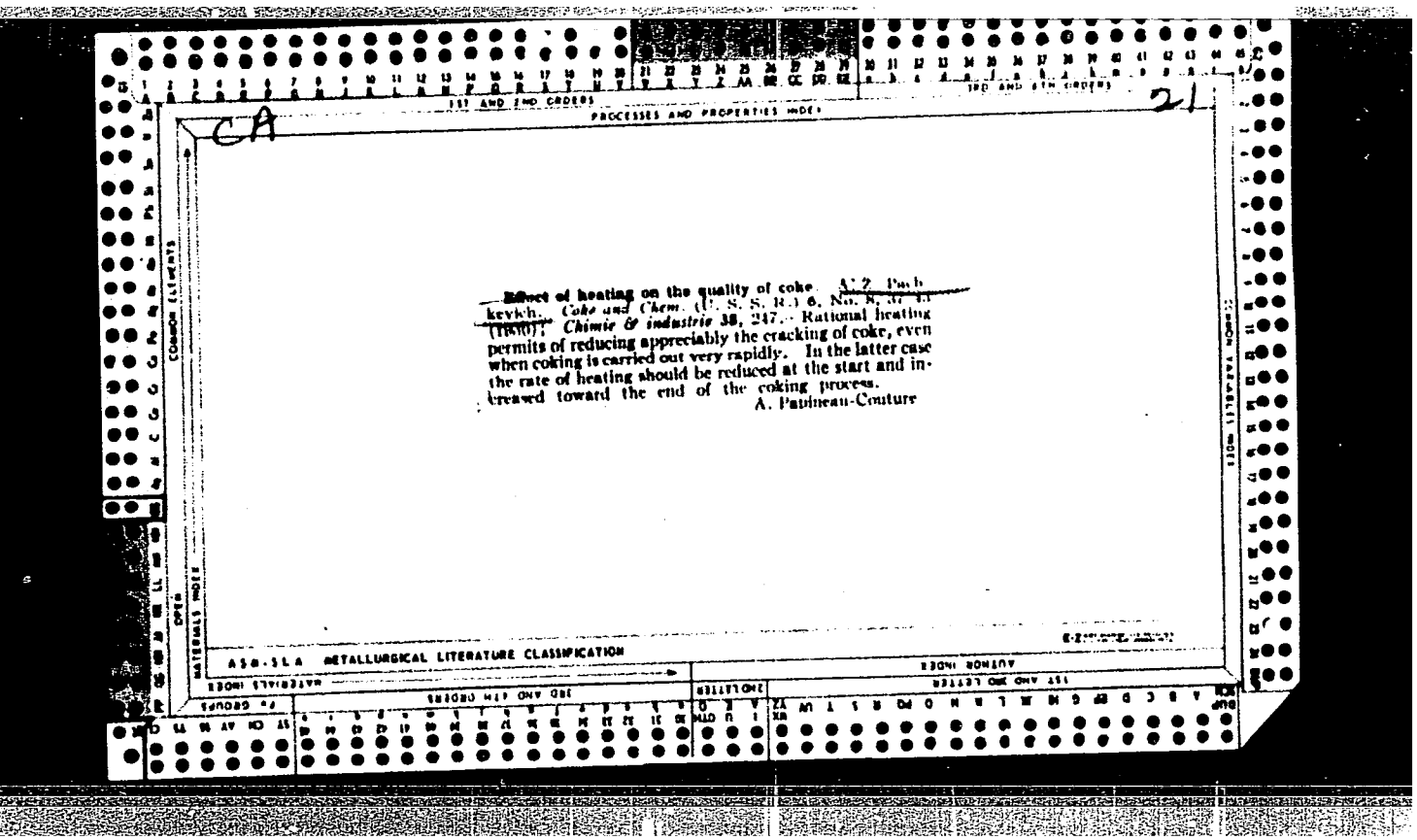
Teeth

Morphological changes in intact but functioning teeth. Stomatologiia, No. 1, 1953.

Monthly List of Russian Accessions, Library of Congress, June 1953. Uncl.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238



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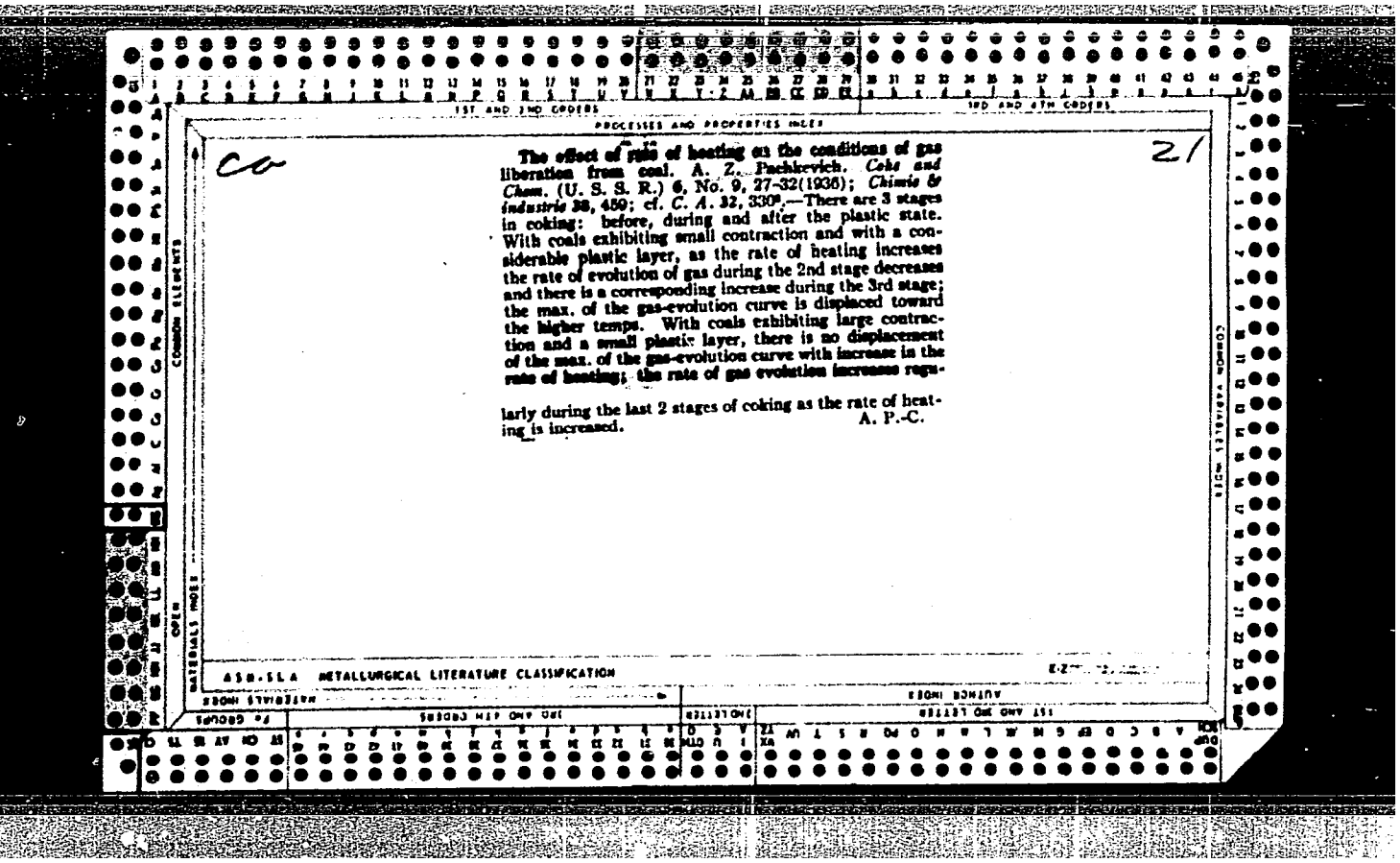
"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238



Co

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The effect of rate of heating on the conditions of gas liberation from coal. A. Z. Pashkevich. *Koks and Chem.* (U. S. S. R.) 6, No. 9, 27-32(1936); *Chimie & Industrie* 38, 459; cf. *C. A.* 32, 3309.—There are 3 stages in coking: before, during and after the plastic state. With coals exhibiting small contraction and with a considerable plastic layer, as the rate of heating increases the rate of evolution of gas during the 2nd stage decreases and there is a corresponding increase during the 3rd stage; the max. of the gas-evolution curve is displaced toward the higher temps. With coals exhibiting large contraction and a small plastic layer, there is no displacement of the max. of the gas-evolution curve with increase in the rate of heating; the rate of gas evolution increases regularly during the last 2 stages of coking as the rate of heating is increased. A. P.-C.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHKIN, V. A.

Opyt stroitel'stva gazoprovoda Saratov-Moskva. [Experience in building the Saratov-Moscow gas pipeline]. (Gorodskoe khoz-vo Moskvy, 1946, no. 7-8, p. 6-11, illus., map).

DLC: HD4677.M6G6

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress Reference Department, Washington, 1952, Unclassified

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

[illegible], V. A. and Komarovskiy, I.

"The First-Born of the Gas Industry: Saratov Gas in Moscow" (Pervenets gazovoy industrii. Saratovskiy gaz v Moskve), Moscow, 1947

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHKIN, V. A.

New methods in the technique of gas main construction. Moskva. Pravda. 1949. 23 p. (50-55241)

TN880.P2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHKOLINA, I.; KOTKOV, K.A., kand.ist.nauk, red.

[Mordovia under the Soviet regime; a brief bibliography] Mordoviia za gody sovetskoi vlasti; kratkii ukazatel' literatury. Sost. I.Pachkolina. Red. K.A.Kotkov. Saransk, 1957. 74 p. [In Russian and Mordvinian.] (MIRA 11:6)

1. Saransk. Mordovskaya respublikanskaya biblioteka. Bibliograficheskiy otdel.
(Bibliography--Mordovia) (Mordovia--Bibliography)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHKORIYA, E.

Let's see the results. 5 no.1:7-8 Ja '59. (MIRA 11:12)

1. Nachal'nik Upravleniya pozharnoy okhrany Gruzinskoy SSR.
(Georgia--Fire prevention)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

YAKUBOVICH, I.A.; PASKHIN, N.P.; VILYANSKIY, M.P.; BABIN, S.Ye.; SLAVUTSKAYA, N.I.; Prinimali uchastiye: PARADNYA, P.I.; RUPNEVSKAYA, M.L.; PURISMAN, V.I.; LEONOVA, L.F.; PACHKOV, A.S.; BACHURINA, K.M.; FECHIN, M.I.; YUKSINA, L.A.; PONOMAREV, Yu.F.; DYMOVICH, Ye.I.; PIKUSOVA, R.A.

Production and use of synthetic water-soluble polyacrylamide adhesives. Ferm. i spirt.prom. 30 no.8:32-34 '64.
(MIRA 18:1)

1. Moskovskiy likero-vodochnyy zavod.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHKOV, V.G.

CHAADAYEV, S.F., inzhener; PACHKOV, V.G., inzhener.

Founding of brake shoes. Lit. proizv. no.3:27 Mr '57. (MLRA 10:4)
(Founding) (Brakes)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHL, Jiri

Design of press tools. Stroj vyr 11 no. 12: 611-612 '63.

1. Koh-i-noor, n.p., Praha.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

Rev. Applied Mycology
V. 32 Dec 1953

PACHLEWSKI, R.

PACHLEWSKI (R.). **Obserwacje nad rozwojem mykorhizy u degenerującyon drzew owocowych w Szkólkach Kórnickich.** [Observations on the development of mycorrhiza in degenerated fruit trees in Kórnik Nurseries.]—*Acta Soc. Bot. Polon.*, 21, 4, pp. 577–589, 3 figs., 1952. [French summary.]

Studies at the Institute of Phytopathology and Plant Protection, University and Polytechnic, Wroclaw, Poland, have revealed pseudo-mycorrhiza on the roots of poorly developed fruit trees [*R.A.M.*, 29, p. 167] growing on exhausted soil in the Kórnik Nurseries. Endotrophic mycorrhiza of the tolypophage type were found occasionally on normally developed trees growing in the same soil and were quite frequent and abundant on trees growing in normal soil. No mycorrhiza were found throughout the growth cycle of one-year-old apple trees (Antonovka variety) in a nursery hot-bed, but endotrophic mycorrhiza of the tolypophage type were observed on similar saplings growing in the field in another nursery.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHLEWSKI, R.

Investigations of the mycotrophism of natural plant agglomerations on slag and shale banks. p. 267.
(ROCZNIKI NAUK LESNYCH. Vol. 14, 1956, Poland)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 6, June 1957, Uncl.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHLEWSKI, R.

Research on mycotrophism of white pine (Abies alba Mill) in its natural environment in Gory Swietokrzyskie. p. 111.

ROCZNIKI NAUK LESNYCH. (Instytut Badawczy Lesnictwa i Instytut Technologii Drewna) Warszawa, Poland. Vol. 11, 1955.

Monthly list of East European Accessions (EEAI) LC, Vol. 9, no. 2, Feb. 1960

Uncl.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

COUNTRY : Poland B-26
CATEGORY :

ABS. JOUR. : RZKhim., No. 1959, No. 88314

AUTHOR : Pachman, W.
INST. :
TITLE : Fundamentals of Production of Leading Fermented Beverages and Their Nutritional Significance
ORIG. PUB. : Przegl. mleczarski, 1958, 6, No 2, 13-14; No 3, 17-19
ABSTRACT : Processes of lactic acid fermentation of milk are considered, and also the conditions which ensure output of high grade milk-fermentation products. -- G. Oshmyan

CARD:

254

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHMANN, E.

Report on the membership meeting of the Special Committee on Teaching Chemistry at the Czechoslovak Chemical Association of the Czechoslovak Academy of Sciences and on the session of the Czech Section of the Committee held on January 19, 1965. Chem listy 59 no.6:765 Je '65.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

CZECHOSLOVAKIA

PACHNER and BEROUNSKY [affiliation not given].

"Evaluation of Illumination in Industrial Plants"

Prague, Zdravotni Technika a Vzduchotechnika, Vol 6, No 5, 1963, pp 221-225.

Abstract: Presented are directions for evaluating the illumination in industrial plants according to a preliminary method prepared by the Institute of Hygiene and Occupational Diseases (Ustav hygieny prace a chorob z povolani) in Prague. The directions concern the day light (its intensity outside and inside the workshop and its parts, such as work tables) and artificial light (proper voltage and intensity inside the workshop and its parts).

1/1

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHNER, F.

What legislations on regulation of family life are needed to assure healthy development of population. Lek.listy 5 no.21:641-646 1 Nov 50.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHNER, F.

Statistics on abortions; preliminary communication. Lek. listy, Brno 6 no.21:656-661 1 Nov 51. (CIML 21:4)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHNER, J.
Pachner, J.

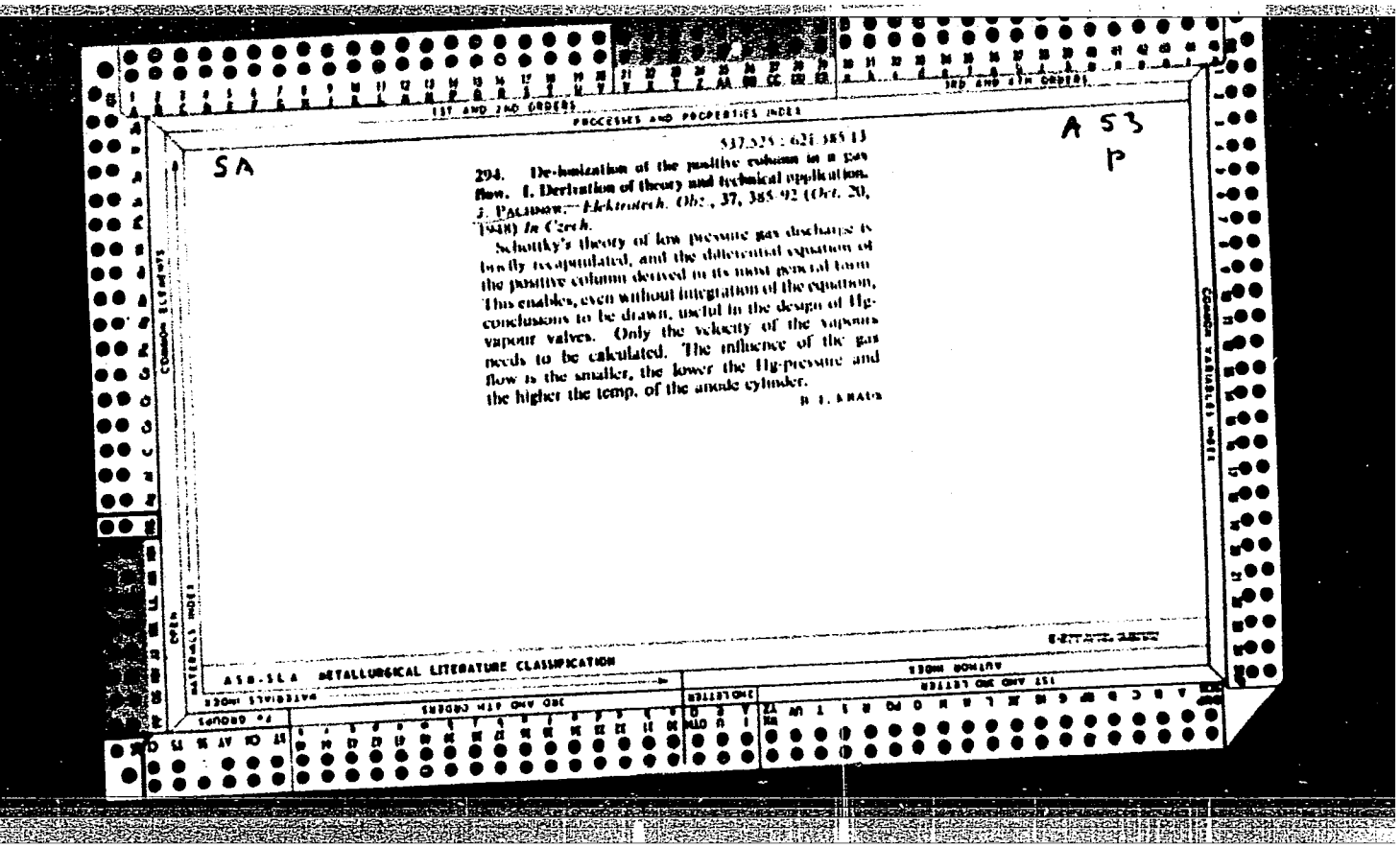
Theory of the diffraction of scalar waves by means of a plane shading device.
Pt. 1. p. 47.

SO: Monthly List of East European Accession, (EEAL), LC, Vol. 4, No. 9,
Sept. 1955, Uncl.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

1ST AND 2ND ORDERS



PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

SA

A 53

P

537.525 : 621.385.13

294. **De-ionization of the positive column in a gas flow. I. Derivation of theory and technical application.** J. PACHNOW.—*Elektrotech. Obz.*, 37, 385-92 (Oct. 20, 1948) *In Czech.*

Schottky's theory of low pressure gas discharge is briefly recapitulated, and the differential equation of the positive column derived in its most general form. This enables, even without integration of the equation, conclusions to be drawn, useful in the design of Hg-vapour valves. Only the velocity of the vapours needs to be calculated. The influence of the gas flow is the smaller, the lower the Hg-pressure and the higher the temp. of the anode cylinder.

B. L. KRAUS

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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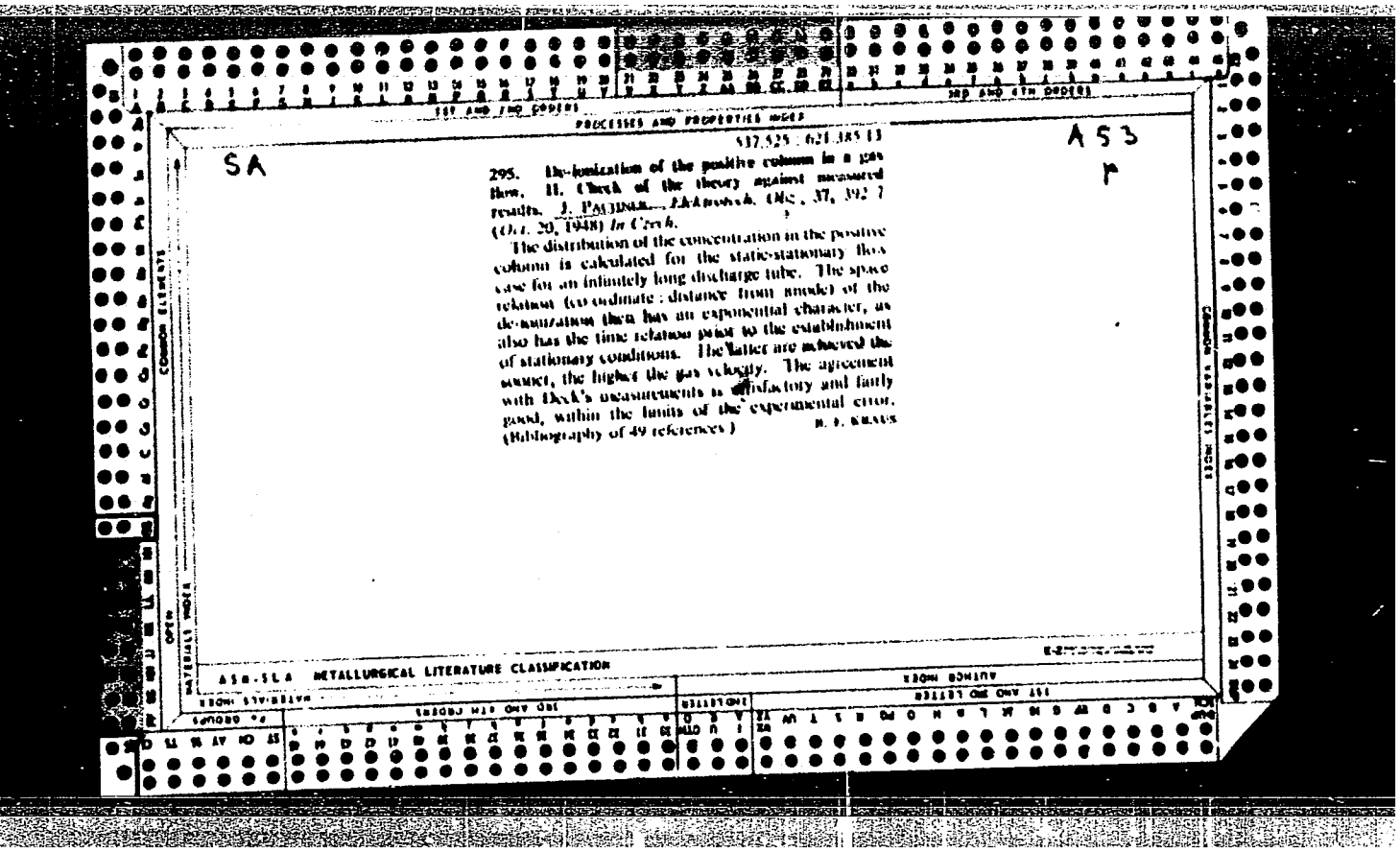

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

SA

A53

P

537.525 : 621.385.13

295. **De-ionization of the positive column in a gas flow. II. Check of the theory against measured results.** J. PACHINER. *Elektrotech. Obz.*, 37, 392-7 (*Oct.* 20, 1948) *In Czech.*

The distribution of the concentration in the positive column is calculated for the static-stationary flow case for an infinitely long discharge tube. The space relation (co-ordinate : distance from anode) of the de-ionization then has an exponential character, as also has the time relation prior to the establishment of stationary conditions. The latter are achieved the sooner, the higher the gas velocity. The agreement with Deck's measurements is satisfactory and fairly good, within the limits of the experimental error. (Bibliography of 49 references.) H. F. KRAUS

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

650. Discharge tube for nuclear reactions with improved yield, by J. Pachner. *Nature*, 161, p. 252, February 14, 1948.

In an article on a "Discharge Tube for Nuclear Reactions with Improved Yield" (*Elektrotechnick'y Obsor*) (Prague), 36, No. 14, 266, 1947, a new discharge tube is described which, besides giving a better yield and minimized target heating, has the advantage that the acceleration of the particles is effected in two stages: acceleration by means of 100-300 Kv. with a current consumption of the order usual for normal discharge tubes using 1-2 MV., and a following principal acceleration by a tension of some megavolts with a current consumption less than five hundredth of usual values.

The article is reviewed with emphasis on the theoretical calculation of the energy conditions in the new tube. TID.

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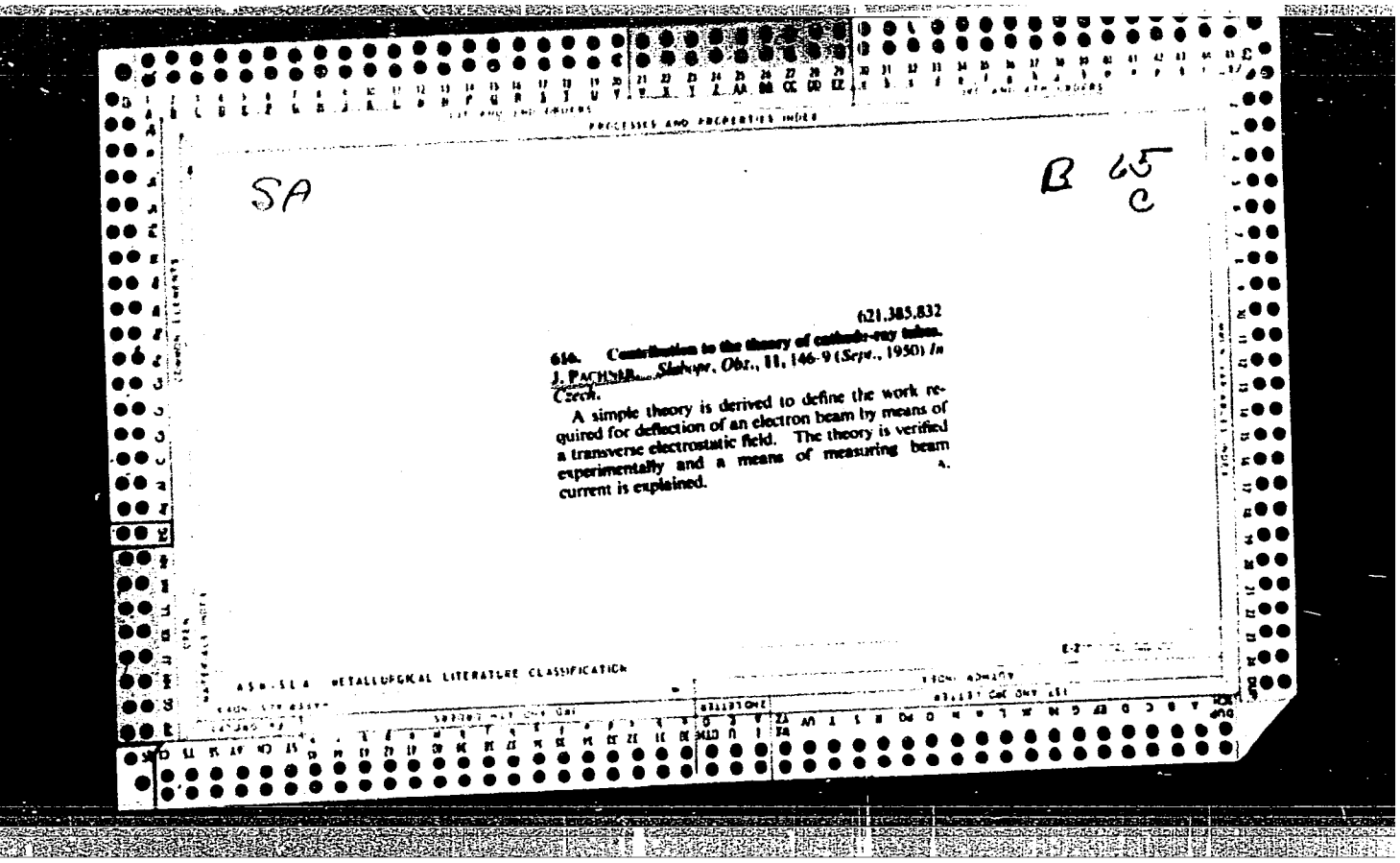

SA

B 65
C

621.385.832

614. Contribution to the theory of cathode-ray tubes. J. PACHNER. *Slaboproud. Obz.*, 11, 146-9 (*Sept.*, 1950) *In Czech.*

A simple theory is derived to define the work required for deflection of an electron beam by means of a transverse electrostatic field. The theory is verified experimentally and a means of measuring beam current is explained. A.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

FACHNER, J.

FACHNER, J. Theory of diffraction of scalar waves by plane surfaces.
Pt. 2. p. 145.

Vol. 5, no. 2, Mar. 1955
CESKOSLOVENSKY CASOPIS PRO FYSIKU
SCIENCE
Czechoslovakia (Praha)

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

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHNER

534.26 : 535.42 : 538.566

9506. A theory of the diffraction of a scalar wave by a plane screen. J. PACHNER. *Czech. J. Phys.*, 3, No. 3, 305–39 (*Aug.*, 1953).

The theory extends the well-known Kirchhoff solution of the diffraction problem of a scalar wave by an infinitesimally thin plane screen to arbitrarily long wavelengths. The resultant field is given by the superposition of two fields. The first of them, called the Kirchhoff approximation, is continuous across the aperture but does not fulfil the boundary condition on the screen. The second field is also continuous across the aperture but at the same time it takes such values on the screen that the resultant field then satisfies the boundary condition also on the screen. The solution is exact if the aperture is circular, while for apertures of arbitrary shape it is merely approximate. The paper contains a general section which is followed by the solution of seven special diffraction problems. Two numerical examples are also given. In Appendix I a new expansion for a spherical wave is deduced which is important for the evaluation of the Kirchhoff and Rayleigh formulae. The matrix representation of some bra-vectors, ket-vectors and linear operators used here for an abstract description of the wave fields is given in Appendix II. Appendix III deals with some relations from the theory of associated Legendre functions which are of general validity. A.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHNER, J.

Theory of diffraction of electromagnetic waves by plane surfaces. p. 379

Vol. 5, no. 4, July 1955
CESKOSLOVENSKY CASOPIS PRO FYSIKU
Praha, Czechoslovakia

So: Eastern European Accession Vol. 5, No. 4, 1956

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHNER, J.

On the geodesics in an expanding universe. Acta physica Pol 22:Suppl.:45-49 '62.

1. Institute of Physics, Technical University, Praha, CSSR.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHNER, J.

Notes on the unified field theory. Bul Ac Pol mat 8 no.7:471-476 '60.

1. Institute of Physics, Technical University, Prague.

(Physics) (Gravitation) (Electricity)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHNER, J.

Some questions of relativistic cosmology. Bul Ac Pol mat 8 no.11/12: 789-794 '60.

1. Institute of Physics, Technical University, Prague. Presented by L. Infeld.

(Relativity(Physics)) (Cosmology)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHNER, JAROSLAV

Category : CZECHOSLOVAKIA/General Problems - Method and Technique of Investigation A-4

Abs Jour : Ref Zhur. - Fizika, No 1, 1957, No 136

Author : Pachner, Jaroslav
Title : On Zd. Horak's Article: "A Generalization of the Normal Error Law."

Orig Pub : Ceskosl. casop. fys., 1955, 5, No 4, 482-483

Abstract : See Abstract No 134

Card : 1/1

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

Category : CZECHOSLOVAKIA/Atomic and Molecular Physics - Heat D-4

Abs Jour : Ref Zhur - Fizika, No 1, 1957, No 882

Author : Pachner, Jaroslav
Title : Heat Transfer in a Gaseous Medium

Orig Pub : Ceskosl. casop. fys., 1955, 5, No 5, 511-521

Abstract : No abstract

Card : 1/1

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHNER, Jaroslav

2

Pachner, Jaroslav. Ergänzung zum Variationsprinzip für klassische Feldtheorien. Ann. Physik (7) 1 (1958), 201–202.

In a recent article [Ann. Physik (6) 19 (1956), 353–368; MR 19, 615] the author discussed in detail the mathematical and physical aspects of a variational principle with reference to a unitary field theory. In an addendum, the functional dependence of the action of particles on the parameters of the latter is discussed, and the author concludes that this dependence should be determined by the solutions of the field equations. *H. Rund* (Durban)

MJI
5/1

Rund

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHNER, JAROSLAV

2

Pachner, Jaroslav. Die Bewegungsgleichungen der unitären Feldtheorie in der niedrigsten Annäherung. Ann. Physik (7) 1 (1958), 351–358.

The equations of motion in the author's unified field theory [Ann. Physik (6) 19 (1957), 353–368; 20 (1957), 368–380; (7) 1 [(1958), 110–115; MR 19, 615, 1140] are worked out by the Einstein-Infeld-Hoffman method, and yield the Coulomb as well as the Newtonian force. It is stated that the author's Lagrangian differs from Bonnor's [Proc. Roy. Soc. London Ser. A. 226 (1954), 366–377; MR 16, 755] only by a cosmological term, but that the identifications of electric and magnetic fields are exchanged. *F. A. E. Pirani* (Chapel Hill, N.C.)

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1/1

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

EAST GERMANY/Theoretical Physics - Relativity. Unified Field Theory.

Abs Jour : Ref Zhur - Fizika, No 6, 1959, 12156

Author : Pachner, Jaroslav

Inst : Technical College, Prague, Czechoslovakia

Title : Unified Field Theory in the Maxwell Approximation.

Orig Pub : Ann. Physik, 1958, 2, No 1-2, 36-40.

Abstract : The author considers a unified Einstein field theory, built up on the basis of the variational principle

$$\delta \frac{1}{2\kappa} \int [g^{ik}(R_{ik} - 2\kappa \Gamma_{ik}) + K] d\tau = 0.$$

where $F_{ik} = \Gamma_{k,i} - \Gamma_{i,k}$, $\Gamma_i = \Gamma_{ik}^{k} - \Gamma_{ki}^{k}$.

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHNER, Jaroslav (Prague 2, Na Smetance 16)

Principles of relativistic cosmology. Cs cas fys 15 no.1:1-28 '65.

1. Submitted September 26, 1964.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHNER, Jaroslav

The metric of an expanding universe with locally nonhomogeneous and anisotropic mass distribution. Acta physica Pol 25 no.5:735-740 My '64.

1. Institute of Physics, Technical University, Prague, Czechoslovakia.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHNER, Jaroslav

Cosmological considerations on the relativity of inertia. Acta physica Pol 23 no.2:132-148 F '63.

1. Physical Institute, Technical University, Prague, Czechoslovakia.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

PACHNER, Jaroslav
SURNAME (in caps); Given Names

Country: Czechoslovakia

Academic Degrees: not given

Affiliation: Institute of Physics of the Technical High School, Prague
/no original language affiliation given/

Source: Leipzig, Annalen der Physik, Vol 8, No 1-2, 1961, pp 60-75.

Data: "Concerning a Relativistic Cosmology."

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012387

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238

25145
P/045/61/020/005/008/008
B133/B212

24.2200 (1158, 1482, 1395)

AUTHOR: Pachner, Jaroslav

TITLE: Influence of a magnetic dipole upon the gravitational field

PERIODICAL: Acta Physica Polonica, v. 20, nos. 5-6, 1961, 475-492

TEXT: The influence of a weak magnetic dipole upon the gravitational field of a body with spherically symmetric mass distribution is investigated. It is found that the magnetic dipole also exhibits a weak gravitational quadrupole. A discussion of the results shows that there exist no measurable differences between the general relativity theory of Einstein-Maxwell and the unified field theory considered in this paper in the domains outside the elementary particles. The aim of the author is not to discuss the physical and logical foundations of his theory, but to show with the help of the concrete example of the magnetic dipole in the gravitational field, where this theory will furnish measurable differences with respect to the general relativity theory. In the first part of the paper, the problem is treated exactly but the integrations of the equations derived are too complicated. After this, the author solves the equations by assuming that the

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