VZOROV, B.A., kand.tekhn.nauk; BUDYKO, Yu.I., kand.tekhn.nauk; KOGANER, V.E.; MAL'TSEV, A.V.; ZAYCHENKO, S.N.; SATAROV, V.A.; ABOLTIN, E.V.

Brief news. Avt.prom. 31 no.10:40-48 O '65. (MIRA 18:10)

L 10233-66 EPA/EWT(m)/EWP(w)/EWP(f)/EWP(v)/T-2/EWP(k)/ETC(m) WW/EM

ACC NR: AP6003192 SOURCE CODE: UR/0147/65/000/004/0125/0132

AUTHOR: Sherstyuk, A. N.; Zaychenko, Ye. N.; Aboltin, E. V.; Kriger, V. A. 49

ORG: none B

TITLE: Effect of the number of rotor blades 26 on the characteristics of a mixed-flow compressor ?)

SOURCE: IVUZ. Aviatsionnaya tekhnika, no. 4, 1965, 125-132

TOPIC TAGS: compressor, mixed flow compressor, compressor design, compressor blade

ABSTRACT: A series of experiments were conducted to determine the effect of the number of blades on the performance characteristics of a mixed-flow compressor with an exit blade angle of 90°. The obtained results show that for a compressor with a rotor diameter on the order of 130 mm, the optimum number of blades is about 14. A reduction in the number of blades results in an increase in the optimum discharge coefficient ϕ. For example, when the number of blades is reduced from 14 to 4, ϕ increases from 0.23 to 0.25. This increase is due to the decrease in the angle of attack, since the latter is directly proportional to the number of blades. The presented curves can be used to calculate compressor performance characteristics. Orig. art. has: 6 figures and 5 formulas. [AS]

SUB CODE: 13/ SUBM DATE: 02Dec64/ ORIG REF: 003/ ATD PRESS: 4174

Card HW 1/1

ZAYCHENKO, Ye.N.; ABOLTIN, E.V.

Power needed for the drive of the turbocompressor supercharger of a motor-vehicle engine. Avt. prom. 31 no.9:6-9 S '65. (MIRA 18:9)

1. TSentral'nyy nauchno-issledovatel'skiy ordena Trudovogo Krasnogo Znameni avtomobil'nyy i avtomotornyy institut.

L 39692-66 EWT(1)/T-2/EWP(t) WW/GD-2
ACC NR: AP6009726 (A) SOURCE CODE: UR/0114/66/000/003/0026/0029

AUTHOR: Zaychenko, Ye. N. (Engineer); Kriger, V. A. (Engineer); Aboltin, E. V. (Engineer) /2 B

ORG: none

TITLE: Investigation of the effect of vaneless-diffuser width upon compressor characteristics

SOURCE: Energomashinostroyeniye, no. 3, 1966, 26-29

TOPIC TAGS: compressor, diffuser, diffuser design

ABSTRACT: Some results of an experimental investigation of a centrifugal compressor with an axiradial impeller are reported. Standard characteristics of the compressor were measured at a constant speed (33000 rpm or 242 m/sec) and at different widths of its vaneless diffuser. Three groups of experiments with

Card 1/2 UDC: 621.515.001.5

L 39692-66
ACC NR: AP6009726

three different impellers (K86-7,5; K78-7,5; K78-11) were conducted. The ratio $\bar{b}_3 = b_3/b_2$ was varied between 0.72 and 1.507. These findings are reported: (1) Variation of the diffuser-width to blade-width ratio $0.9 < b_3/b_2 < 1.2$ and also variation of the widening of the vaneless diffuser, $0.843 < b_4/b_3 < 1.15$, do not appreciably affect the compressor efficiency (in the region of small and partially medium values of the flow coefficient φ); outside the above limits, and particularly with higher φ values, the effect is appreciable; hence, a vaneless-diffuser width of $b_3 \approx b_2$ is recommended; (2) The variation of b_3/b_2 within the investigated range does not permit adjusting the compressor characteristic in accordance with the air discharge; (3) The variation of the diffuser airflow area within the above range does not appreciably affect the energy received by the air in the compressor impeller. Orig. art. has: 3 figures, 3 formulas, and 2 tables.

SUB CODE: 13 / SUBM DATE: none / ORIG REF: 006

Card 2/2 gd

ABOLTIN', M.[Aboltins,M.]

Development of the spleen vein in the fetus and the newborn. In Russian. Vestis Latv ak no.4:169-174 '60. (EEAI 10:7)
(SPLEEN) (FETUS)

ABOLTIN', M. [Abolitina, M.]

Interrelations between the spleen vessels and the pancreas in fetuses and the newborn. Vestis Latv ak no.6:179-186 '60.
(EEAI 10:9)

(SPLEEN) (PANCREAS) (FETUS) (INFANTS)

ABOLTIN', M. Yu.

Cand Med Sci - (diss) "Splenic vein in fetuses and in newly born human beings." Riga, 1961. 17 pp with illustrations; (Academy of Sciences Latvian SSR, Inst of Experimental and Clinical Medicine); 300 copies; price not given; (KL, 7-61 sup, 256)

ABOLTIN, V Ya.

TSAGOLOV, N.A., prof., doktor ekon.nauk; BLYUMIN, I.G., prof., doktor ekon.nauk [deceased]; RUMYANTSEV, A.M., prof.; KORNIYENKO, A.A., dotsent, kand.ekon.nauk; SHNEYERSON, A.I., prof., doktor ekon.nauk; LIF, Sh.B., prof., doktor ekon.nauk; SHVEDKOVA, G.M., kand.ekon. nauk; FISHEVSKIY, Yu.K.; DVORKIN, I.N., doktor ekon.nauk; SIDOROV, I.F.; KHAFIZOV, R.Kh., kand.ekon.nauk; NIKOLAYEV, A.B., kand.ekon. nauk; AVRAMCHUK, F.P., kand.ekon.nauk; AL'TER, L.B., doktor ekon. nauk; BOYARSKIY, A.Ya., prof., doktor ekon.nauk; BREGEL', E.Ya., prof., doktor ekon.nauk; ARZUMANYAN, A.A.; VOLODIN, V.S., dotsent, kand.ekon.nauk; MIKSHA, L.S., kand.ekon.nauk; BUNKINA, M.K., dotsent, kand.ekon.nauk; YEVREYSKOV, A.V., kand.ekon.nauk; FADEYEVA, T.A., kand.ekon.nauk; KOLGANOV, M.V., prof., doktor ekon.nauk; KHROMUSHIN, G.B., kand.ekon.nauk; MOSHENSKIY, M.G., kand.ekon.nauk; IVANOV, N.N., kand.ekon.nauk; GUTTSAYT, M.G., dotsent, kand.ekon. nauk; ABOLTIN, V.Ya., prof., doktor ekon.nauk; KOLLONTAY, V.M., kand.ekon.nauk; GLUKHAREV, L.I., kand.ekon.nauk; POKROVSKIY, A.I., kand.ekon.nauk; DADASHEV, G.A., dotsent, kand.ekon.nauk; ALESHINA, I.V., kand.ekon.nauk; ZHAMIN, V.A., dotsent, kand.ekon.nauk;

(Continued on next card)

TSAGOLOV, N.A.--(continued) Card 2.
KOZLOV, A.P.; TIMOFEYEV, T.T., kand.istor.nauk; ALEKSEYEV, A.M., dotsent, kand.ekon.nauk; FILATOVA, Ye.M., dotsent, kand.ekon.nauk. Prinimali uchastiye: VOLKOV, F.M., kand.ekon.nauk; KHROMUSHIN, G.B.; VOZNESENSKIY, L.A., nauchnyy sotrudnik. SPERANSKAYA, L., red.; CHEPELEVA, O., tekhn.red.

[Criticism of present-day bourgeois, reformist, and revisionist economic theories] Kritika sovremennykh burzhuaznykh, reformistskikh i revizionistskikh ekonomicheskikh teorii. Pod red. N.A.TSagalova. Moskva, Izd-vo Sotsial'no-ekon.lit-ry, 1960. 588 p. (MIRA 13:5)

1. Moscow. Universitet. 2. Chlen-korrespondent AN SSSR (for Arzumanyan).
(Economics)

KHOROSHAYA, Ye.S., kand.tekhn.nauk; KOVRIGINA, G.I., nauchnyy sotrudnik; KOROLEVA, Z.A., nauchnyy sotrudnik; ABOLTINA, E.M., nauchnyy sotrudnik; YEGOROVA, N.I., nauchnyy sotrudnik

Microchemical method of determining the degree of vulcanization of rainwear fabrics. Nauch.-issl.trudy VNIIPIK no.12:105-107 '60. (MIRA 16:2)

GAMOVA-KAYUKOVA, N.I., kand.biol.nauk; SAMYSHKINA, M.A., starshiy nauchnyy sotrudnik; BERNSHTEYN, M.M., kand.tekhn.nauk; MUSATOVA, M.D., mladshiy nauchnyy sotrudnik; ABOLTINA, K.M., mladshiy nauchnyy sotrudnik; CHERKESOVA, E.I., mladshiy nauchnyy sotrudnik; IVANOVA, R.A., laborant.

Resistance to moulds of artificial leather, cardboard and ent-duck samples. Nauch.-issl. trudy VNIIPIK no.13:65-83 '62. (MIRA 18:1)

L 20621-66 EWT(1)/T/EWA(h) IJP(c) AT
ACC NR: AP6010263 SOURCE CODE: UR/0371/66/000/001/0034/0041

AUTHOR: Grigulis, Yu. K.—Grigulis, J.; Aboltin'sh, E. E.—Aboltins, E.

ORG: Power Engineering Institute, AN LatvSSR (Institut energetiki AN Latv SSR) 31 13

TITLE: Measurement of the electrophysical properties of a semiconductor with a slit field source 9M 21

SOURCE: AN LatSSR. Izvestiya. Seriya fizicheskikh i tekhnicheskikh nauk, no. 1, 1966, 34-41

TOPIC TAGS: semiconducting material, resonant cavity, resonator, electronic measurement

ABSTRACT: A contactless method was used to measure the thickness and specific resistance of semiconducting materials by exposing them to a uhf field acting through a slit in a resonator. By considering the field parameters in the resonator for the case in which one of its walls is made of semiconductor material, the general dependence of Q on the specific resistance of the material ρ was found. The dependence of Q on ρ was then found for the case in which the semiconductor fills a slit in one of the resonator walls. All computations were made for a single resonator type with dimensions $a = \ell = 2b = 20$ mm and the TE_{101} mode 2

Card 1/2

L 20621-66

ACC NR: AP6010263

of oscillation at a frequency of 10^{10} cps. An analysis of the theoretical relationships and experimental results has indicated that the slit should preferably be located in the end wall of the resonator, perpendicular to the current force lines (TE_{10} wave). The sensitivity of measurements was found to depend on the length of the slit and is inversely proportional to it. The width of the slit has little effect on sensitivity. A slit 8—15 mm long and 0.5 mm wide can be used in measurements without the necessity of signal amplification. The specific resistance of semiconductors in the range of 0.01—10 ohm·cm can be measured by slit field sources with an accuracy of ±10%. Orig. art. has: 5 figures. [JR]

SUB CODE: 09/ SUBM DATE: 23Apr65/ ORIG REF: 006/ OTH REF: 002
ATD PRESS: 4224

Card 2/2

L 60227-65 EWT(1)/T/EWA(h) Pz-6/Peb

ACCESSION NR AT5015561

AUTHOR: Grigulis, Yu. K., Aboltyn', E. E

TITLE: Measuring the resistivity and surface [illegible] of semiconductor structures by an electromagnetic shf field

SOURCE: AN LatSSR. Institut energetiki. Trudy, no. 17. 1964. Poluprovodniki i ikh primeneniye v elektrotekhnike, 3. Upravlyayemyye poluprovodnikovyye vyprvamitel'nyye elementy i ikh primenen[illegible]

ABSTRACT. The results of a theoretical and experimental study of the physical characteristics of semiconductor laminate [illegible] penetration of a shf field, from [illegible]

L 60227-65
ACCESSION NR: AT5013591

...teristic impedance are calculated (curves shown); two particular cases are analyzed: (1) The field undergoes a complete attenuation in the surface layer; (2) The field penetrates the surface layer and dissipates in the base without reflection. Formulas are derived for determining the characteristic-impedance ...ients for structures containing semiconductor, metal, and dielectric ...ers. An experimental outfit comprised a ...

USSR / General Problems of Pathology. Tumors. Human U
Neoplasms.

Abs Jour: Ref Zhur-Biol., No 11, 1958, 51784.

Author : Abolulyev, D. M., Gaibov, T. D.
Inst : Azerbaydzhan Scientific Research Institute of Blood Transfusion.
Title : The Status of Vascular Reflexes in Leukosis.

Orig Pub: Sb. nauchn. tr. Azerb. n-i, in-ta perelivaniya Krovi, 1957, vyp. 3, 45-47.

Abstract: The regulation of vasomotor reactions may be considerably disturbed in chronic forms of leukosis. Depending upon the condition of the patient, the effect of the cerebral cortex on the subcortical structures is considerably intensified in some cases, decreased, in others. During periods of

Card 1/2

USSR / General Problems of Pathology. Tumors. Human U
Neoplasms.

Abs Jour: Ref Zhur-Biol., No 11, 1958, 51784.

Abstract: remission of chronic leukosis, the vascular reactions of the patients are almost undistinguishable from normal. In acute forms of leukosis, the regulation of vascular reflexes on the part of the cortex as well as of the subcortical centers, suffers still greater changes. -- I. F. Shudibil.

Card 2/2

ABOL'YAN, A.M.; TOLMACHEVA, Z.I.

Technique of revising topographic maps. Geod. i kart. no.7:52-54 Jl '64.
(MIRA 17:12)

ABOLYAYEV, B.V.

Improved fastening of snowplow drums. Kats. predl. na gor. elektro-transp. no.9:78-79 '64. (MIRA 18:2)

1. Sluzhba puti Tramvayno-trolleybusnogo upravleniya Sverdlovska.

SHTENBERG, A.I.; KUSEVITSKIY, [illegible]; ABOLIN', [illegible]

Effect of cobalt on the thyroid gland state caused by low-protein diet against a background of different iodine supply. Vop. pit. 22 no.3:41-47 My-Je '63. (MIRA 17:8)

1. Iz otdela gigiyeny pitaniya (zav. - prof. A.I. Shtenberg) Moskovskogo instituta gigiyeny imeni F.F. Erismana.

ABOMA, L. P.

ABOMA, L. P.: "The external and economic qualities of latgal race horses." Min Higher Education USSR. Latvian Agricultural Academy. Riga, 1956 (Dissertation for the Degree of Candidate in Sciences)

Agricultural

So: Knizhnaya letopis', No 17, 1956

ABOMELIK, R.A., inzh.; LUPAR', A.I., inzh.; CHUDOTVORTSEV, V.M., inzh.

Use of piles in the construction of open 220 and 500 kv. power distribution units of the Bratsk Hydroelectric Power Station. Energ. stroi. no.41:54-63 '64. (MIRA 17:11)

ABONYAN, S.B.

Petrographic composition of basic and ultrabisic rocks of the Kyasaman massif in the Armenian S.S.R. Izv.AN Arm.SSR. Geol. i geog.nauki 16 no.2:7-14 '63. (MIRA 16:9)

1. Institut geologicheskikh nauk AN Armyanskoy SSR.

ABONYI, A.

Exploration of the Silica Caves system. p. 185. KRASY SLOVENSKY. Bratislava. VOL. 31, No. 6, June 1954.

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

9(2)

H/009/60/02/003/010
D0018/D3001

AUTHORS: Radvány, Jenõ and Abonyi, Mrs. István

TITLE: Designing of Strictly Specified Directional Filters 25

PERIODICAL: Magyar Hiradástechnika, 1960, Nr 2, pp 43-51

ABSTRACT: The article describes a method of designing directional wave filters with strict reflection specification. The wave filter's sections are designed in the form of doubly derived filter sections. These are then turned into sections resembling simple derived filters and as such are joined to form a directional filter. A table and a diagram are included for calculating the band limits of sections before joining them. There are 13 figures, 5 graphs, 1 table and 4 references of which 2 are Hungarian, 1 English and 1 German.

ASSOCIATION: BHG

Card 1/1

ABONYI, Istvan

Application of national norms in the complex lumbering.
Munka szemle 7 no.9:22-24 S'63.

ABONYI, Istvan

Application of labor norms and incentive awards in complex lumbering. Erdo 12 no.10:443-450 O '63.

1. Orszagos Erdeszeti Foigazgatosag munkaugyi osztalyanak vezetoje, Budapest.

ABONYI, Istvan

Application of correlation calculus in preparing silvicultural work norms. Erdo 13 no.5:206-213 My '64.

1. Head, Labor Division, National Main Directorate of Forestry, Budapest.

ABONYI, Istvan

Determination of the cutting maturity in the interest of the maximum increase in the wood production. Erdo 13 no.7:292-296 Jl '64.

1. Head, Labor Division, National Main Directorate of Forestry, Budapest.

ABONYI, Ivan

Nobelium, a new transuranium element. Fiz szemle 9 no.1:34-35 Ja '59.

ABONYI, Ivan

Observation of roton, the quantum of circulation in superfluent helium. Fiz szemle 9 no.1:35-36 Ja '59.

ABONYI, Ivan

New magic numbers of nucleons. Fiz szemle 9 no.1:36 Ja '59.

ABONYI, Ivan

Artificial moons and the Telestar broadcast. Fiz szemle 9 no.1:36 Ja '59.

ABONYI, I.

Basic equations of magnetofluido-dynamics in anisotropic media. Acta phys Hung 17 no.1/2:91-95 '64.

1. Institute of Theoretical Physics Lorand Eotvos University, Budapest. Presented by Z.Gyulai.

IVANYENKO, D.D. [Ivanenko, D.D.]; ABONYI, Ivan [translator]

Development in the physics of elementary particles. Fiz szemle 9 no.4:111-116 Ap '59.

ABONYI, Ivan

The relativistic Boltzmann equation and its stationary solution.
Magy fiz folyoir 8 no.1:13-20 '60. (EEAI 9:13)

1. Eotvos Lorand Tudomany Egyetem Elmeleti Fizikai Intezete, Budapest.
(Relativity (Physics)) (Particles)

ABONYI, Ivan

Magnetohydrodynamic waves in a cavity resonator of the form of torus
Magy fiz folyoir 8 no.6:463-469 '60. (EEAI 10:5)

1. Eotvos Lorand Tudomanyegyetem Elmeleti Fizikai Intezete, Budapest.
(Magnetohydrodynamics) (Microwaves)
(Electric resonators)

TAMM, I.E.; ABONYI, Ivan [translator]

Physics of high-energy particles. Fiz szemle 10 no.5:148-149 My '60.

SZEDOV, L.I. [Sedov, L.I.]; ABONYI, Ivan [translator]

Orbits of moon rockets. Fiz szemle 10 no.8:241-245 Ag '60.

ABONYI, Ivan

Determination of the most probable velocity of the average impulse of relativistic particle multiplicity. Magy fiz folyoir 9 no.1:21-33 '61. (EEAI 10:6)

1. Eotvos Lorand Tudomanyegyetem Elmeleti Fizikai Intezete, Budapest.
(Particles) (Relativity (Physics))

ABONYI, Ivan

Filter determination of color pictures by means of color tangent. Pt.1. (to be contd.) Kep hang 8 no.3:73-76 Je '62.

ABONYI, Ivan

Filter determination for color pictures by means of a color tangent. Pt.2. Kep hang 8 no.4:121-125 Ag '62.

ABONYI, Ivan

The most possible impulse and the most possible energy of the relativistic particle multitude. Magy fiz folyoir 10 no.4:259-264 '62.

1. Eotvos Lorand Tudomanyegyetem Elmeleti Fizikai Intezete, Budapest.

ABONYI, Ivan

Some questions on the theory of manual color control. (~~To be contd.~~).
Kep hang 9 no.1:6-8 F '63.

ABONYI, Ivan

Supplement to a paper entitled "Filter determination of color pictures by means of color tangents." Kep hang 9 no.1:9 F '63.

GRATTON, Livio; ABONYI, Ivan [translator]

Development of stars. Fiz szemle 13 no.3:79-84 Mr '63.

HEIRTZLER, J.R.; ABONY, Ivan [translator]

The longest electromagnetic waves. Fiz szemle 13 no.9:259-262 S '63.

ABONYI, Ivan

Conference on plasma physics, Balatonszabadi, May 29-31, 1963.
Fiz szemle 13 no.9:288 S '63.

ABONYI, Ivan

A new experimental proof on the relativistic velocity addition.
Fiz szemle 13 no.9:268 S '63.

ABONYI, Ivan, dr.; SIMNO, Arthur.

New Nobel prize winners. Klet tud 19 no.5:195-199
31 Ja '64.

ADONYI, Ivan, tudomanyos munkatars (Budapest)

Controlled thermonuclear fissions. Pt. 2. Term tud kozl 4 no. 11: 492-494 N '60.

ABONYI, Ivan, tudomanyos munkatars (Budapest)

Controlled thermonuclear fizzions. Pt. 1. Term tud kozl 4 no. 5:209-211 My '60.

ABONYI, Ivan; KOVESY, Zsuzsa; SZABO, Janos

Validity of the generalized Ohm's law in a magnetic plasma. Magy fiz folyoir 12 no.1:45-57 '64.

1. Chair of Theoretical Physics, Lorand Eotvos University, Budapest (for Abonyi and Szabo). 2. Central Research Institute of Physics, Hungarian Academy of Sciences, Budapest (for Kovesy).

ABONYI, Ivan

Basic equations of mangetohydrodynamics in anisotropic mediums.
Magy fiz folyoir 12 no.3:245-249 '64.

1. Chair of Theoretical Physics, Lorand Eotvos University, Budapest.

ABONYI, Ivan, dr.

Basic knowledge of elementary particles. Elet tud 19 no.13:589-592 Mr '64.

IJP(c)

Relativistic forms of Boltzmann equation

Plasmaphysik

Boltzmann equation, plasma physics

forms of

Lichart and Ka

restricted to the case

45 formulas.

ASSOCIATION: Institute of Theoretical Physics, R. Eotvos University, Budapest

SUB CODE: 000 OTHER:

Card 1/1

L 29639-65 IJP(c)

ACC NR: AP6020137 SOURCE CODE: HU/0034/65/013/004/0367/0380

22
E

AUTHOR: Abonyi, I.

ORG: Department of Theoretical Physics, Eotvos Lorand Scientific University, Budapest (Eotvos Lorand Tudomanyegyetem Elmeleti Fizikai Tanszek)

TITLE: Relativistic Boltzmann equation. Part 1

SOURCE: Magyar fizikai folyoirat, v. 13, no. 4, 1965, 367-380

TOPIC TAGS: Boltzmann equation, distribution function, Lorentz transformation

ABSTRACT: A review was made of the forms for the relativistic Boltzmann equation proposed to-date, of the transformation property of the distribution function, of the derivation of the relativistic Boltzmann equation, and of the four-dimensional form of the relativistic Boltzmann equation. The behavior of the various members in the relativistic Boltzmann equation towards Lorentz transformation were discussed. Orig. art. has 4 figures and 33 formulas. [JPRS]

SUB CODE: 20/ SUBM DATE: 19Dec64/ OTH REF: 013/ SOV REF: 005

Card 1/1 UDC

ABONYI, Lajos, dr.

Dog exhibition in Budapest. Elovilag 8 no.4:24-25 Jl-Ag '63.

1. Magyar Ebtenyesztok Orszagos Egyesuletenek alelnoke.

ABONYI, Laszlo

Experiences with the implementation of a government decree on labor norms. Munka 12 no.8:8-9 Ag '62.

1. Szakszervezetek Orszagos Tanacsa munkaber osztalyanak munkatarsa.

ABONYI, Laszlo

Experiences in fulfilling labor norms. Munka 14 no.9:7 S '64.

1. Wage Division, Central Council of Hungarian Trade Unions, Budapest.

ABONYI, R.

"Situation of the Supply of Lumber in the Furniture Industry", P. 209, (FAIPAR, Vol. 4, No. 7, July 1954, Budapest, Hungary)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

ABONYI, R.

Technical development of the furniture industry.

p. 172 (Faipar) Vol. 7, no. 4, Sept. 1957, Budapest, Hungary

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

ABORINA, A.

27-12-11/27

AUTHOR: Aborina, A., Director of the Verifications and Measurements Laboratory, Novosibirsk Oblast Labor Reserves Administration

TITLE: The Quality of Production and the Uniformity of Measurements (Kachestvo produktsii i yedinstvo mer)

PERIODICAL: Professional'no - Tekhnicheskoye Obrazovaniye, 1957, # 12, p 16 (USSR)

ABSTRACT: The article states that, as a rule, practical training at the Labor Reserve schools is organized on the basis of complicated production. Exact measuring instruments were required for the technical control of the quality of the manufactured articles. It happened that the measurements considerably differed from the blueprints because of incorrect measuring instruments, and this made it necessary to organize the Oblast' Control and Measuring Section of the Labor Reserve Administration at Technical School # 19 in Novosibirsk. The author describes the equipment of this section, and states that at the schools certain instructors are now responsible for presenting the devices and instruments to the section for checking. On the other hand, the schools are controlled by inspectors of the

Card 1/2

section. On the suggestion of Technical School # 19 (Tekhnicheskoye uchilishche No 19), the curriculum of many schools will be supplemented by a special subject dealing with the organization of technical control of the workshops at plants and schools.

ASSOCIATION. Verifications and Measurements Laboratory, Novosibirsk Oblast Labor Reserves Administration (Kontrol'no-izmeritel'naya laboratoriya Novosibirskogo oblastnogo upravleniya trudovykh rezervov)

AVAILABLE: Library of Congress

ABOS, Bruno, okleveles vegyeszmernok, fomernok

Surface water treatment plants of the Budapest Waterworks.
Hidrologiai kozlony 41 no.3:228-233 Je '61.

1. Budapesti Vizmuvek.

ABOS, Bruno; PAPP, Szilard, dr., a kemiai tudomanyok kandidatusa; SEBESTYEN, Olga, dr., a biologiai tudomanyok kandidatusa; SZEBELLEDY, Laszlone, dr.

Remarks about Bela Kovats' study entitled "Insuring quality requirements in supplying drinking water from storage reservoirs." Hidrologiai kozlony 42 no.2:128-131 Ap '62.

1. Fovarosi Vizmuvek, Budapest (for Abos). 2. Orszagos Kozegeszsegugyi Intezet, Budapest; "Hidrologiai Kozlony" szerkeszto bizottsagi tagja (for Papp). 3. Magyar Tudomanyos Akademia Biologiai Kutato Intezete, Tihany; "Hidrologiai Kozlony" szerkeszto bizottsagi tagja (for Sebestyen). 4. Vizgazdalkodasi Tudomanyos Kutato Intezet, Budapest (for Szebelledy).

BOZOKY-SZESZICH, Karoly; ABOS, Bruno; SZILAGYI, Laszlo, VAGAS, Istvan

Examination of cylindrical reservoirs from the point of view of fluid mechanics. Hidrologiai Kozlony 45 no.4:156-172 Ap '65.

1. Chair of Water Resources Development of the Technical University of Building and Transportation, Budapest (for Bozoky-Szeszich).
2. Editorial Board Member, "Hidrologiai Kozlony" (for Vagas).

ABDUKOV, M. I.

301 Razrabotka, rudnykh Mestorozhdeniy. (Ucheb. Posobiye Dlya Gornykh Vuzov). 3-ye Ispr. I Dop. Izd. M., Metallurgizdat, 1954. 616s. S Ill. 23 SM 12,500 EKZ. 14r. 75k. V Per.--Bibliogr: s. 615-16 (35 Nazv.)-(54-55517)
622.34:622.2 t 622.2

SO: Knizhnaya, Letopis, Vol. 1, 1955

RAKOS, Rezso, dr.,; ABOSSY, Istvan, dr.

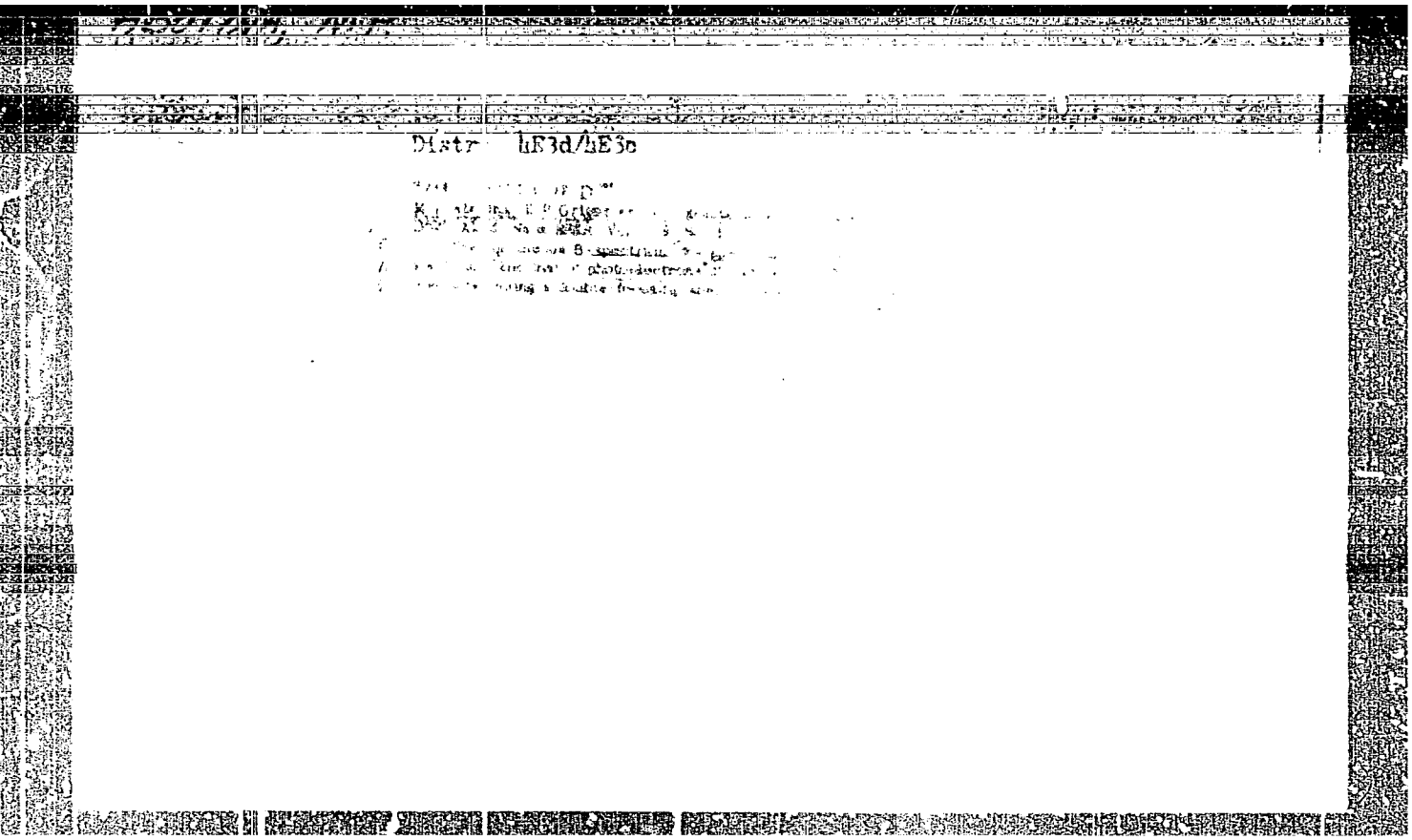
Giant cyst of the thorax. Orv. hetil. 96 no.14:387-388 3 Apr 55.

1. A Satoraljaujhelyi Jarasi Korhaz (igazgato: Valenta Andras dr.) Sebeszeti Osztalyanak (foorvos: Rakos Rezso dr.) es a Jarasi Tbc. Gondozo Intezet (vezeto-foorvos: Abossy Istvan dr.) kozlemenye.
(THORAX, cysts, giant, surg.)
(CYSTS, thorax, giant, surg.)

ABOSSY, Istvan, dr.; DOBOS, Laszlo, dr.; SZABADOS, Sandor, labor. asszisztens

Clinical observations and early therapeutic results in prednisolone treatment. Tuberkulozis 16 no.6:183-186 Je '63.

1. A satoraljaujhelyi Varosi Tbc Korhaz (igazgato: Abossy Istvan dr.) kozlemenye.
(TUBERCULOSIS, PULMONARY) (PREDNISOLONE)
(CORTICOTROPIN) (SURGERY, OPERATIVE)
(ANTITUBERCULAR AGENTS)



Distr: lE3d/lE3c

ABOV, A.M., inzh.

Level indicator. Mekh. i avtom.proizv 15 no.3:28-29 Mr '61.
(MIRA 14:3)
(Liquid level indicators)

ABOV, M.A.

Increasing the time of operation of turbodrills between overhauls.
Neft. khoz. 35 no.8:24-27 Ag '57. (MIRA 10:11)
(Turbodrills—Repairing)

AUTHOR: Abov, G.A., Works Director.

TITLE: Ways of decreasing the cost of refined copper at the Moscow Copper Smelting and Electrolytic Works imeni Molotov. (Puti snizheniya sebestoimosti rafinirovannoy medi na Moskovskom medeplavilnom i elektrolitnom zavode imeni Molotova.)

PERIODICAL: "Tsvetnye Metally" (Non-ferrous Metals), 1957, No. 1, pp. 2 - 6, (U.S.S.R.)

ABSTRACT: The raw material for the production of crude and refined copper at the Molotov works contains, besides copper, zinc, lead, tin, nickel, antimony and small quantities of previous metals. A procedure has been developed and applied for obtaining a tin-rich alloy for bronze from slags containing lead, tin and nickel. Besides the direct value of the alloy, the adoption of the procedure will enable the converter treatment and refining of copper to be accelerated. Improvements are also being made in nickel removal from the electrolyte, in minimising white-metal losses to the atmosphere. Since raw material costs account for 77% of the production costs at the works (fuel and electricity 13%, wages 10%) special attention is being given to minimising copper losses in slag, but fuel economy is also being improved. Much will be done during the sixth Five Year Plan to increase mechanisation and automation, to improve organisation and to reduce overheads.

ABOV, YU. G.

ABOV, YU. G. --"Neutron Crystal Spectrometer with a Cambered Quartz Monocrystal and Investigations Conducted on it with respect to the Dependence of Complete Effective Sections of Plutonium, U^{233} and U^{235} on the Energy of Neutrons and of the Spectrum of the Neutrons Emerging from the Reactor." Acad Sci USSR, Moscow, 1955 (Dissertation For the Degree of Candidate in Physicomathematical Sciences)

SO: Knizhnaya letopis' No. 37, 10 September 1955

ABOV, Yu. G.

4067 AEC-tr-2435((Pt. 1) (p.269-18))
A BENT-CRYSTAL NEUTRON SPECTROMETER WITH A QUARTZ SINGLE-CRYSTAL. Yu. G. Abov. p.269-16 of CONFERENCE OF THE ACADEMY OF SCIENCES OF THE USSR ON THE PEACEFUL USES OF ATOMIC ENERGY, JULY 1-5, 1955. SESSION OF THE DIVISION OF PHYSICAL AND MATHEMATICAL SCIENCES. (Translation). 8p.
This paper was originally abstracted from the Russian and appeared in Nuclear Science Abstracts as NSA 9-7862.

A Bov, Yu. G.

2

A crystal spectrometer for neutrons with bent quartz monocrystal. Yu. G. Abov, *Sessiya Akad. Nauk S.S.S.R. po Mirnomu Ispol'zovaniyu Atomnoi Energii, Zasedaniya Otdel. Fiz.-Mat. Nauk* 1955, 294–304(English summary, 304–5).—The instrument described uses the neutron beam of a D_2O reactor; the curvature radius of the monocrystal is 2000 mm.; it is similar to the Cauchois spectrometer. A multiple-slit system was used in order to work at small angles without interfering with the direct neutron beam; the slits were located inside the channel in the reactor shield, their walls being Cd sheets. The collimated neutron beam fell upon the (10$\bar{1}$0) or (13$\bar{4}$0) planes of a large quartz monocrystal of 6 × 7 × 0.2 cm., the diffracted beam was detected by aid of a BF_3 proportional counter which worked at 400 mm. Hg pressure and had an operating length of 60 cm. The crystal was bent by applying 2 equal but opposite moments to the ends of the slab. The neutron cross sections of Pu isotopes were measured in the energy interval from [illegible] to 2 e.v. The values found changed with the energy, thus once they are all measured, such a device can be used as a neutron spectrometer. Thus, e.g., at the 0.3-e.v. resonance level of Pu^{239} one finds E_r = 0.300 ± 0.015 e.v., Γ = 0.124 ± 0.002 e.v., σ_r = 4500 ± 300 barns. The energy spectra of the neutrons as they emerge from the reactor are also presented. The temp. difference between neutrons and moderator is about 40°.

Werner Jacobsen

LYASHCHENKO, B.G.; LITVIN, D.F.; PUZEY, I.M.; ABOV, Yu.G.

Neutron diffraction examination of nickel-iron alloys of the permalloy group. Kristallografiia 2 no.1:64-73 '57. (MIRA 10:7)

1. TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii.
(Permalloys) (Neutrons--Diffraction)

ABOV, Yu. G., Cand. Phys. and Math. Sci.

"Neutron Diffraction Study of Permalloy-type Iron-nickel Alloys," with Lyashchenko, B.G.; Litvin, D. F.; Puzey, I. M., Cand. Phys. and Math. Sci, p. 397.

In book Problems of Physical Metallurgy, Moscow, Metallurgizdat, 1958, 603p. (Its: Sbornik trudov, v. 5)

The articles in the book present results of investigations conducted by the issuing body, Inst. of Physical Metallurgy, a part of the Cent. Sci. Res. Inst. of Ferrous Metallurgy, located in Dnepropetrovsk. The investigations were concerned with phase transformations in alloys, strengthening and softening processes, diffusion processes (studied with the aid of radioactive isotopes), and certain other questions.

70-3-2-3/26

AUTHORS: Lyashchenko, B.G., Litvin, D.F., Puzey, I.M., Abov, Yu.G. and Golovkin, V.S.

TITLE: Investigation of the Defect Structure of Metallic Monocrystals by a Neutron Diffraction Method (Izucheniye defektnoy struktury metallicheskikh monokristallov neytronograficheskim metodom)

PERIODICAL: Kristallografiya, 1958, Vol.3, Nr 2, pp 148 - 154 (USSR).

ABSTRACT: A neutronographic investigation of the fragmentary structure of single crystals of nickel alloys has been made and the effect of this structure on the character and intensity of the scattered neutron beams is demonstrated. A short review of work on the neutronographic investigation of the structures of synthetic single crystals is included.
One of the consequences of the low absorption of neutrons in most materials is the importance of secondary extinction. Bacon has shown that, for X-ray formulae to apply, the dimensions of a single mosaic crystal should be proportional to the width of the Darwin curve (angular distribution of the mosaic blocks). For KBr with a Darwin width of less than 3' this limiting thickness is 1.5 - 2 mm. The effect of volume defects of dimensions greater than those of the mosaic blocks is of interest and

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Investigation of the Defect Structure of Metallic Monocrystals by a Neutron Diffraction Method

leads to the break-up of diffraction spots into small patches. 14 specimens of monocrystals have been examined. They were alloys of Ni and Fe with different quantities of Mo, Cr and Cu. The spherical specimens were etched with a mixture of nitric and hydrochloric acids and vacuum annealed for 4 hours at 750 °C. The orientation of the crystals could be seen from the Laue patterns. Finer orientation was achieved with a magnetic method to 1-2°. The spheres were finally polished so that the maximum differences in diameter were less than 1 μ in 7-12 mm. The axes were marked on the surface with gold spots electrolytically deposited. The composition was checked on sliced-up specimens. Investigations were carried out on the single-crystal neutron spectrometer of the Ac.Sc. USSR, the method being similar to that used by Lowde. The accuracy of the intensity measurements was about 1%.
Most specimens showed anomalous reflection curves. Contour plots were made of various reflections. Diagrams for the 020 reflection of two Ni-Fe alloys are reproduced. For one specimen, there was a difference amounting to a factor of 2.5 between the intensities of reflections hkl and $\overline{hkl}$. Investigating this effect, a small slit was scanned across the diffracted

Investigation of the Defect Structure of Metallic Monocrystals by a Neutron Diffraction Method

beam. The effect was shown not to be due to multiple diffraction. X-ray investigation of the specimen disclosed appreciable boundary regions separating fragments disoriented by up to 20'. This caused the reflections 222, 222, 222 and 222 to come only from one fragment and 222, 222, 222 and 222 to come from the other.
There are 5 figures, 1 table and 13 references, 4 of which are Soviet, 9 English.

ASSOCIATION: Institut metallofiziki (Institute of Metal Physics)

SUBMITTED: June 3, 1957
Card 3/3

A Bov, Yu. G.

21(8) PHASE I BOOK EXPLOITATION SOV/2583

International Conference on the Peaceful Uses of Atomic Energy. 2nd, Geneva, 1958.

Doklady sovetskikh uchenykh; yadernyye reaktory i yadernaya energetika. (Reports of Soviet Scientists; Nuclear Reactors and Nuclear Power) Moscow, Atomizdat, 1959. 707 p. (Series: Its: Trudy, vol. 2) Errata slip inserted. 8,000 copies printed.

General Eds.: N.A. Dollezhal', Corresponding Member, USSR Academy of Sciences, A.I. Alikhanov, Doctor of Physical and Mathematical Sciences, A.I. Leypunskiy, Member, Ukrainian SSR Academy of Sciences, I.I. Novikov, Corresponding Member, USSR Academy of Sciences, and V.S. Fursov, Doctor of Physical and Mathematical Sciences; Ed.: A.P. Alyab'yev; Tech. Ed.: Ye. I. Mazel'.

PURPOSE: This book is intended for scientists and engineers engaged in reactor designing, as well as for professors and students of higher technical schools where reactor design is taught.

CONTENTS: This is the second volume of a six-volume collection on the peaceful uses of atomic energy. The six volumes contain the reports presented by Soviet scientists at the Second International Conference on Peaceful Uses of Atomic Energy, held from September 1 to 13, 1958 in Geneva. Volume 2 consists of three parts. The first is devoted to atomic power plants under construction in the Soviet Union; the second to experimental and research reactors, the experiments carried out on them, and the work to improve them; and the third, which is predominantly theoretical, to problems of nuclear reactor physics and construction engineering. Yu. I. Koryakin is the science editor of this volume. See SOV/2081 for titles of all volumes of the set. References appear at the end of the articles.

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E032/E314

AUTHOR: Abov, Yu.G. 19

TITLE: Theory of Crystal Neutron Monochromators (A Review)

PERIODICAL: Pribory i tekhnika eksperimenta, 1960, No 2, pp 3 - 14 (USSR)

ABSTRACT: Goldberger and Seitz (Ref 1) have shown that the diffraction of neutrons by crystals is analogous to the diffraction of X-rays. Bacon and Lowd (Ref 2) were therefore able to use the already existing results on the diffraction of X-rays in their detailed discussion of the diffraction of neutrons by single crystals. Bacon's monograph (Ref 3) gave a definitive account of the theory of neutron diffraction. However, so far, there are various inaccuracies and errors in the published papers dealing with the reflectivity of crystals. The present author is therefore giving a systematic account of the most important, from the practical point of view, points of the theory of crystal neutron spectrometers and diffractometers. No derivations are given and the paper is concerned largely with the determination of conditions under which existing and well-known formulae can be used. The paper is divided into the following

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Theory of Crystal Neutron Monochromators (A Review)

sections:
1) Reflectivity and integral reflection.
2) Integral reflection by a perfect crystal.
3) Integral reflection by ideally imperfect crystals.
4) Slightly diverging beam of non-monochromatic neutrons.
5) Experimental determination of the angular divergence of a diffracted beam of neutrons.
6) The spectrum of a diffracted neutron beam.
7) Higher-order reflections.

The review is based on Western papers, only one Soviet reference being quoted. There are 14 references, 1 of which is Soviet, 2 are Russian translations from English and 11 are English.

ASSOCIATION: Institut teoreticheskoy i eksperimental'noy fiziki AN SSSR (Institute of Theoretical and Experimental Physics of the Ac.Sc., USSR)

SUBMITTED: December 15, 1959

Card 2/2

AEOV, Yu.G.; LITVIN, D.F.

Experimental neutron diffraction methods (survey). Prib. i tekh. eksp. no.3:3-15 My-Je '60. (MIRA 14:10)

1. Institut teoreticheskoy i eksperimental'noy fiziki AN SSSR.
(Neutrons--Diffraction)

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E032/E414

21.2100

AUTHORS: Abov, Yu.G., Beketov, V.A., Gul'ko, A.D., Yermakov, O.N., Krupchitskiy, P.A., Taran, Yu.V. and Shatlovskaya, N.S.

TITLE: Production of Polarized Neutrons by Reflection From a Cobalt Mirror

PERIODICAL: Pribory i tekhnika eksperimenta, 1960, No.4, pp.51-55

TEXT: The method of obtaining polarized thermal neutrons by reflection from magnetic mirrors was described by Hughes and Burgy (Ref.1) and Akhiyezer and Pomeranchuk (Ref.2). In order to obtain neutrons with practically a single spin state it is necessary that the component of the induction B which is parallel to the surface of the mirror should be greater than a certain minimum value. When this condition is satisfied practically all the reflected neutrons will have spins parallel to B. In the case of pure cobalt it can be shown, using the data of Shull and Wollan (Ref.3), that $B \geq 11200$ gauss. Strictly speaking, this is the condition for the quantity $B - H$ where H is the magnetic field in the gap of the magnet. According to Bozort (Ref.4) the saturation value of $B - H$ is 17900 gauss. As a result, the condition for complete polarization of neutrons reflected from a

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Production of Polarized Neutrons by Reflection From a Cobalt Mirror

magnetized mirror of pure cobalt can be written down in the form

$$(B - H) \geqslant 63\% \ (B - H)_s \qquad (1)$$

The present authors have used these ideas to produce polarized neutrons. The apparatus employed is shown schematically in Fig.2. A narrow vertical neutron beam was formed by a collimator which was 1.2 m long and had a rectangular slot of 110 x 3 mm. The neutron flux at the exit of the collimator was 4×10^7 neutrons/cm^2 sec. The cobalt mirror-polarizer was fixed between the magnet poles. The magnet-mirror system could be adjusted to the required position and in order to obtain a definite separation between the direct and the reflected beams a special brass screen, which could be adjusted with the aid of a micrometer screw, was provided. The cobalt mirrors employed were 100 mm x 500 mm x 40 μ. The cobalt was deposited electrolytically on a 5 mm thick copper plate. The analysing mirror was held in another magnet and was also adjustable.

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Production of Polarized Neutrons by Reflection From a Cobalt Mirror

In order to separate the beams reflected from the first and second mirrors, special cadmium and copper screens placed in front of the second mirror were employed. The neutrons were recorded by a high-efficiency multi-wire proportional counter filled with B^{10}-enriched BF_3. A cadmium slit, 1.5 mm wide and 60 mm long, was placed in front of the counter. It was found that the degree of polarization obtained with an angle of incidence of 8 minutes was $75 \pm 2\%$. 100% Polarizations were obtained at greater angles of incidence. Mirrors made of an alloy of cobalt and 7% iron were also investigated but the maximum polarizations obtained did not exceed 60%. In the case of the pure cobalt mirrors, the flux of polarized neutrons at $\theta = 8$ min was 3×10^5 neutrons/cm^2 sec at the centre of the beam, the half-width of the beam being 8 mm and the height 100mm (magnetic field in polarizer magnet = 600 Oe). The total intensity was 2×10^6 neutrons/sec. Acknowledgments are expressed to Yu.Ya.Garrison, A.K.Dubasov, N.M.Regentov and A.I.Savushkin for their assistance and to T.B.Nova for valuable advice. There are 4 figures, 1 table and 9 references: 3 Soviet

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E032/E414

Production of Polarized Neutrons by Reflection From a Cobalt Mirror

and 6 non-Soviet (3 of which are translated into Russian).

ASSOCIATIONS: Institut teoreticheskoy i eksperimental'noy fiziki AN SSSR (Institute of Theoretical and Experimental Physics AS USSR) all authors except Yu.V.Taran; Ob"yedinennyy institut yadernykh issledovaniy (Joint Institute for Nuclear Studies) Yu.V.Taran

SUBMITTED: April 9, 1960

Fig. 2

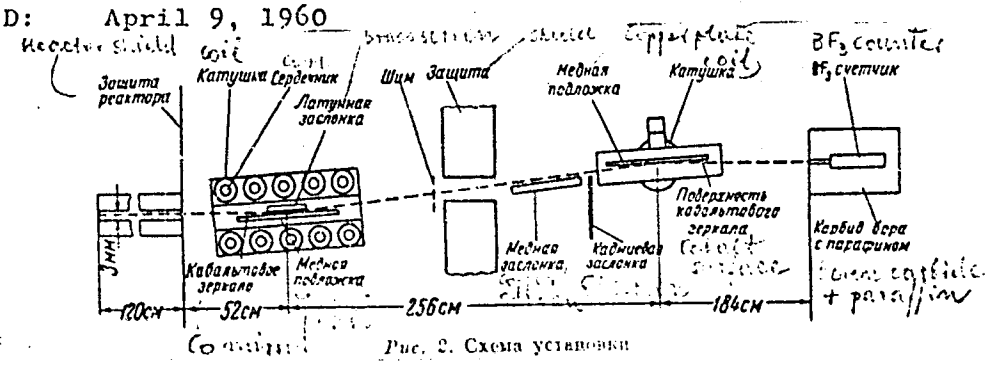

Рис. 2. Схема установки

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AUTHOR: Abov, Yu.G. and Averkin, B.A.

TITLE: A Demountable End-window Proportional Neutron Counter

PERIODICAL: Pribory i tekhnika eksperimenta, 1961, No. 1, pp. 181 - 182

TEXT: In neutron-diffraction work, use is frequently made of cylindrical end-window neutron counters filled with boron trifluoride. The anode is normally in the form of a tungsten or molybdenum wire, placed along the axis of the counter, the axis being oriented in the direction of the neutron beam. The anode is commonly attached to the entrance window by means of a glass insulator, 7-10 mm long. As a result, a dead space is introduced and this reduces the efficiency of the counter. The counter described in the present paper is free of this disadvantage. The counter is shown schematically in Fig. 1. It consists of a set of vertical small counters contained in a common envelope. The dimensions of the rectangular entrance window are chosen, depending on the cross-section of the

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A Demountable ....

neutron beam. The anode is in the form of 15 tungsten wires connected in series (diameter 0.05 mm). Metal grids are placed between the wires and are attached to the earthed brass body. Since the neutron beam (entering from the left in Fig. 1) is perpendicular to the anodes, the dead space mentioned above is excluded. The absorption of neutrons in the window itself (copper foil 0.2 mm thick) is negligible. The grids and the wires are attached to brass electrodes through glass insulators. The counter is fully demountable and is filled with B^{10}-enriched boron trifluoride at a pressure of 400 mm Hg. The working length of the counter is 300 mm. There are 3 figures.

SUBMITTED: January 16, 1960

A Demountable ....

Fig. 1: Sectional drawing of the counter: 1 - insulator; 2 - tube; 3 - insulator; 4 - insulator; 5 - pumping line; 6 - lid; 7 - bolt; 8 - supporting rib; 9 - packing; 10 - grid frame (cathode); 11 - lead; 12 - counter body; 13 - wire (anode); 14 - guard ring.

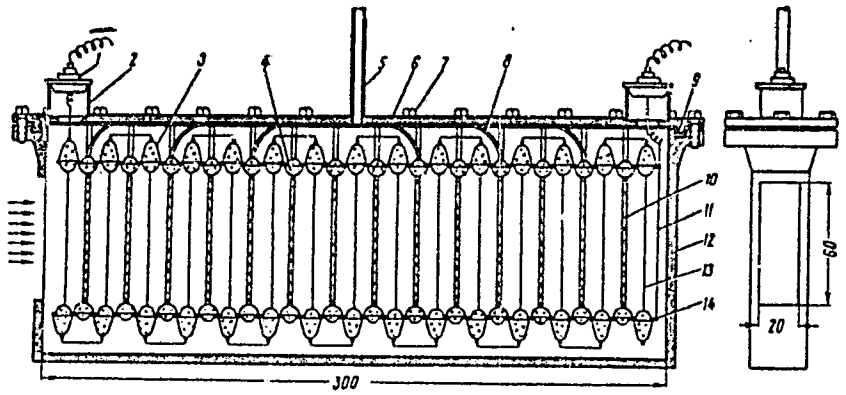

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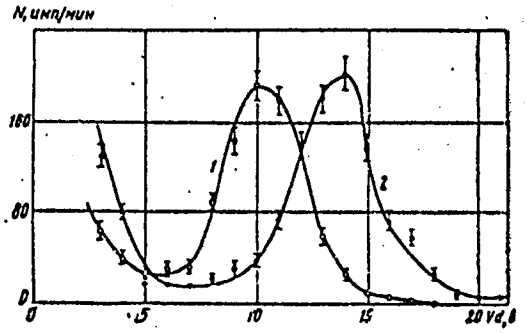
Fig. 2: Pulse-height distribution. Curve 1 was obtained with +1730 V and Curve 2 with +1840 V. The body is earthed. A collimated neutron beam from a radium-beryllium source, surrounded by paraffin, was directed at the end window of the counter. The counter was covered by a paraffin-boron screen. Amplifier УШ-10 (USh-10) - length 5μs, rise time 0.13 μs, amplification 5000, channel width 2 V.



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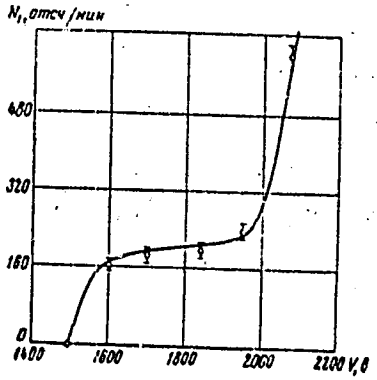
A Demountable ....

Fig. 3: Counting characteristic. Conditions as under Fig. 2; counts per min. along vertical axis, voltage along horizontal axis. Discrimination level of kicksorter 5 V.



Card 5/5.

USSR (cont.)

ALIKHANOV, A. A., Institute for Physical Problems imeni S. I. Vavilov, Academy of Sciences USSR, Moscow - "Neutronographic study of $NiCO_3$" (Section J-2)

BELOV, N. V., Associate Director, Institute of Crystallography, Academy of Sciences USSR, Moscow - "Magnetic (ferromagnetic) space group symmetry" (C-6)

BELOV, N. V., NERONOVA, N. N., Both Institute of Crystallography, Academy of Sciences USSR, Moscow, DONNAY, J. D. H., Johns Hopkins University, Baltimore, Md., and DONNAY, G. H., Geophysical Laboratory, Carnegie Institution, Washington, D. C. "Tables of magnetic space groups, II. Special positions" (C-6)

BOROVIK-ROMANOV, A. S., Institute for Physical Problems imeni S. I. Vavilov, Academy of Sciences USSR - "Antiferromagnetic resonance in carbonates of transition elements" [sic] (M-16)

BOROVIK-ROMANOV, A. S., ALEKSANYAN, G. G., RUDASHEVSKIY, G. Ye. - "Piezomagnetic effect in antiferromagnets" (M-18)

KONDORSKIY, Ye. I., Head, Magnetism Laboratory, Moscow State University - (1) "The electrical and galvanomagnetic properties of thin films at very low temperatures" (M-5); (2) "On the connection between the spontaneous magnetization of current carriers and the Nernst-effect in ferromagnetic metals" (M-4); "The exchange interaction and magneto- [illegible]

LOBACHEV, B., and [illegible], B., Institute of Crystallography, Moscow - "Electron diffraction study of thiourea $CO(NH_2)_2$"

LYASHENKO, B. G., Central Scientific Research Institute of Metallurgy, Moscow - "The problem of the influence of spontaneous magnetization on crystal structure and phase state of alloys" (M-8)

LYASHENKO, B. G., LIVITIN, D. F., PUZEY, I.M., [redacted] G. Central Scientific Research Institute of Metallurgy, Moscow - "Neutron diffraction investigation of order-disorder in the alloys 'Ferrum-nickel and ferrum-cobalt'" (J-1)

OZEROV, R. P., KOGAN, V. S., ZHDANOV, G. S., Scientific Research Physico-Chemical Institute imeni L. Ya. Karpov, Moscow - "Neutron diffraction study of the structure of solid hydrogen and deuterium" (C-8)

PINSKER, Z. G., Institute of Crystallography, Academy of Sciences USSR, Moscow - "Results and progresses of electron diffraction analysis" (C-11)

PUZEY, I. M., Scientific Research Institute of Metallurgy, Moscow - "Magnetic anistropy in monocrystals of Ni-Fe-Co alloys" (M-9)

SHUR, Yakov S., Scientific Research Institute of Metallurgy, Moscow - "Some problems of the physics of high coercive materials" (M-17)

SMOLENSKIY, G. A., Institute of Semiconductors, Leningrad - "Some investigations of non-metallic ferro and antiferromagnetics" (M-13)

VAYNSHTEYN, B. K., Institute of Crystallography, Academy of Sciences USSR - "Development of electron diffraction method" (C-11)

YAMZIN, I. I., BELOV, N. V., NOZIK, Y. Z., Institute of Crystallography, Moscow - "Atomic and magnetic structures of magnese ferrite" (J-2)

VONSOVSKIY, S. V., Institute of the Physics of Metals, Academy of Sciences USSR, Sverdlovsk. A member of the IUPAP Commission on Magnetism. See paragraph 1 of Comment for a complete listing of members of the Commission. "Some investigations of Soviet physics on the theory of ferromagnetism for the last years" (Invited paper. Section M-11)

paper to be submitted for the IUPAP Intl. Conference on Magnetism and Crystallography, Kyoto, Japan, 25-30 Sep 1961

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000100130009-7"

AEOV, Yu.G.; AVERKIN, B.A.

Sectional end-window proportional neutron counter. Prib. i tekh. eksp. 6 no.1:181-182 Ja-F '61. (MIRA 14:9)
(Nuclear counters)

LYASHCHENKO, B.G.; LITVIN, D.F.; ABOV, Yu.G.

Neutron diffraction study of iron-cobalt alloys. Kristallografiia 6 no.4:553-559 Jl-Ag '61. (MIRA 14:8)

1. Institut metallovedeniya i fiziki metallov.
(Neutron diffraction crystallography) (Iron-cobalt alloys)

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S/089/62/012/002/012/013
B102/B138

21.5110

AUTHORS: Abov, Yu. G., Belkin, V. F., Krupchitskiy, P. A.

TITLE: Criticality stand tests of a heavy-water reactor with rod-shaped fuel elements

PERIODICAL: Atomnaya energiya, v. 12, no. 2, 1962, 156 - 159

TEXT: It is hard to make accurate enough calculations for systems with porous fuel elements, as used in power reactors. A special test stand has been developed for checking theoretical results (Fig. 1), and used to find the critical size for heavy-water reactors with various different fuel rod systems. A scram system automatically stops chain reactions when criticality is exceeded. The critical dimensions of five types of working channels were determined in dependence on lattice pitch. Average weight of the fuel elements, uncoated uranium rods (density 18.80 g/cm^3) was 793.0 ± 1g. Criticality was determined from counting rate using four CHM-3 (SNM-3) neutron counters. The heavy-water temperature was kept at

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