DOMANSKIY, B. I., Prof

USSR/Electricity - Power Systems Nov 51
Automatic Control
Literature

"Review of I. I. Solov'yev's Book 'Automatic Control of Electric Power Systems,'" Prof B. I. Domanskiy, Leningrad

"Elektrichestvo" No 11, pp 93-95

Favorable review of subject book, which includes material on automatic reserve pooling of equipment, automatic repeated reclosing of feeder and trunk lines, automatic regulation of voltage and frequency, automatic emergency

201T70

USSR/Electricity - Power Systems (Contd) Nov 51

unloading of the system, and a very brief discussion of magnetic amplifiers and amplidynes. Published by Gosenergoizdat, 1950, 500 pp, R 17.75.

201T70

DOMANSKIY, B. I.

USSR/Electricity - Scientists Feb 53

"Professor A. M. Zalesskiy (In Connection with His 60th Birthday)," M. A.Shatelen, L. P. Newman, M. P. Kostenko, I. A. Zaytsev, Ye. G. Shramkov, M. D. Kamenskiy, B. I. Kamenskiy, B. I. Domanskiy, V. A. Belyakov, V. T. Renne, V. P. Andreyev, L. M. Piotrovskiy, B. N. Mikhalev, G. A. Kukekov, Yu. A. Sabinin

Elek-vo, No 2, p 94

Recounts chief events in professional life of Prof Aleksandr Mikhaylovich Zalesskiy, born 27 Nov 1892. Long active in field of high-voltage techniques, he has been Chairman of Administrative Board of VNITOE since 1945.

PA 248T29

TUMANSKIY, B.I.

621.316.726.078 ; 621.311.161

3207. Power and frequency regulation of large power grids. B. I. DOLANETSKII AND E. I. YUREVICH. *Elektrichestvo*, 1954, *No.* 2, 3–7. *In Russian.*

Investigates the method of regulating the frequency, exchange power and time in a large interconnected power system or grid, based on the phase angle of the voltage vector at a given nodal point of the system referred to the voltage vector of a standard frequency. This standard frequency may be propagated from a dispatcher's point and the phase angles at generator terminals, station busbars, line ends and main branching points of the system may be kept constant or varied according to the relations between generated and exchanged powers. The possibility of using this method for regulating the transmitted power is based on the well-known relation between the transmitted power and the phase difference of the voltage vectors of the sending and receiving end, respectively, of a line. Particular attention is devoted to clarifying transient processes in tie-lines in systems with lumped parameters (because the influence of such processes in systems with distributed parameters is generally negligible), this mainly applying to systems supplied by turbo-alternators. The second case considered refers to systems in which the elements with distributed parameters cannot be neglected during transient periods; this applies to hydro-electric stations with long penstocks. An experimental arrangement for such investigations is described and some results are presented.

B. F. KRAUS

AID P - 3268

Subject : USSR/Electricity

Card 1/1 Pub. 27 - 23/25

Authors : Naryshkin, I. I., M. A. Shatelen, L. R. Neyman, A. M. Zalesskiy, B. I. Domanskiy, S. V. Usov, V. T. Renne, I. A. Zaytsev, and others

Title : Professor M. D. Kamenskiy. His 70th birthday and 45 years of scientific and educational activity

Periodical : Elektrichestvo, 9, 84-85, S 1955

Abstract : The authors pay tribute to Prof. M. D. Kamenskiy's scientific and educational activity and present a short biographical sketch and description of his activities.

Institution : None

Submitted : No date

8 (6) SOV/112-57-5-10128

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1957, Nr 5, p 77 (USSR)

AUTHOR: Domanskiy, B. I., Romanov, V. A., Potapov, B. I.

TITLE: Problems in Development of Electrohydraulic Speed Control Systems for Hydraulic Turbines (Voprosy razrabotki sistem elektrogidravlicheskogo regulirovaniya skorosti gidroturbin)

PERIODICAL: Tr. Leningr. politekhn. in-ta, 1956, Nr 184, pp 361-365

ABSTRACT: Interconnected power system operation requires a number of automatic control devices to increase economy and reliability; the devices must affect the turbine torque by resetting mechanical speed governors. Growing requirements of the precision of frequency control and load distribution involve allowances for many factors. Specifically, hydraulic-turbine governors must respond to changes in water conditions. In this connection, the adoption of electric sensing units is natural, as they simplify introducing stabilizing means into the control system. The pickups using simple frequency-dependent

SOV/112-57-5-10128

Problems in Development of Electrohydraulic Speed Control Systems for . . . .

circuits have proved the most suitable; specifically, parallel resonant circuits that ensure necessary sensitivity in a broad band of velocity variation (80-130% of the rated velocity) are the most suitable. Resetting of such circuits can be made by changing the inductance of a reactor by additional magnetizing current or by applying appropriate voltages to the circuit. One of the circuit diagrams is presented. Plunger-type and transverse-movement type electromagnets can be used as final control elements.

V.G.D.

GUBENKO, T.P.; DEVYATKOV, N.D.; DOMANSKIY, B.I.; DONSKOY, A.V.; YEFREMOV, I.S.; ZHEZHERIN, R.P.; KAGANOV, I.L.; MANDRUS, D.B.; NETUSHIL, A.V.; PODGURSKIY, Ye.L.; ROZENFEL'D, V.Ye.; SVENCHANSKIY, A.D.; CHUKAYEV, D.S.; SHLYAPOSHNIKOV, B.M.

Professor G.I. Babat; obituary. Elektrichestvo no.1:94 Ja '61. (MIRA 14:4)

(Babat, Georgii Il'ich, 1911-1961)

DOMANSKIY, B.I., prof.; SIDEL'NIKOV, V.V., kand.tekhn.nauk; LEVIT, G.O., in[illegible].

"Fundamentals of the operational control of electric power systems" by A.K.Darmanchev. Reviewed by B.I.Domanskii, V.V.Sidel'nikov, G.O.Levit. Elek.sta. 32 no.8:95-96 Ag '61. (MIRA 14:10)
(Electric power distribution) (Electric power production)

[redacted]

NESSONOV, L.A.; DOMANSKIY, B.I.; DROZDOV, N.G.; D'YACHENKO, N.Kh.; ZHEKULIN, L.A.; ZAYTSEV, I.A.; ZALESSKIY, A.M.; KAMENSKIY, M.D.; KOSTENKO, M.P.; LEBEDEV, A.A.; LOMONOSOV, V.Yu.; MITKEVICH, A.V.; SMIRNOV, V.S.; TOLSTOV, Yu.G.; USOV, S.V.; SHRAMKOV, Ye.G.

L.R. Neiman; on his 60th birthday and the 35th anniversary of his educational work. Elektrichestvo no.6:93-94 Je '62. (MIRA 15:6)
(Neiman, Leonid Robertovich, 1902-)

AYZENBERG, B.L.; ALEKSANDROV, G.N.; GRIBOV, A.N.; GRUZDEV, I.A.; DOMANSKIY, B.I.; DUBINSKIY, L.A.; ZALESSKIY, A.M.; KOSTENKO, M.P.; KOSTENKO, M.V.; LEVINSHTEYN, M.L.; MIKIRTICHEV, A.A.; MIKHAYLOVA, V.I.; NEYMAN, L.R.; RUZIN, Ya.L.; SMIRNOV, V.S.; STEFANOV, K.S.; USOV, S.V.; KHOBERG, V.A.; SHCHERBACHEV, O.V.

Professor M.D.Kamenskii, on his 80th birthday. Elektrichestvo no.7; 92-93 Jl '65. (MIRA 18:7)

SOTSKOV, Boris Stepanovich. DOMANSKIY, B.I., prof., doktor tekhn. nauk, retsenzent; KOLOSOV, S.P., prof., doktor tekhn. nauk, retsenzent; NEFEDOVA, V.I. dots., kand. tekhn. nauk, red.

[Principles of the calculation and design of electromechanical components of automatic and remote control systems] Osnovy rascheta i proektirovaniia elektromekhanicheskikh elementov avtomaticheskikh i telemekhanicheskikh ustroistv. Moskva, Energiia, 1965. 575 p. (MIRA 18:9)

SMIRNOV, V.S.; KOSTENKO, M.P.; NEYMAN, L.R.; KOSTENKO, M.V.; DOMANSKIY, F.L.; ZALESSKIY, A.M.; USOV, S.V.; AYZENBERG, B.L.; DUBINSKIY, L.A.; ALEKSANDROV, G.N.; GRIBOV, A.N.; GRUZDEV, I.A.; LEVINSHTEYN, M.L.; MIKIRTICHEV, A.A.; MIKHAYLOVA, V.I.; RUZIN, Ya.L.; STEFANOV, K.S.; KHOBERG, V.A.; SHCHERBACHEV, O.V.

M.D. Kamenskii; on his 80th birthday. Izv. vys. ucheb. zav.; energ. 8 no.7:130-131 Jl '65. (MIRA 18:9)

VOL'DEK, A.I.; DOMANSKIY, B.I.; DRANNIKOV, V.S.; ZALESSKIY, A.M.; KAMENSKIY, M.K.; KANTAN, V.V.; KASHKAROV, G.Ye.; KIZEVETTER, Ye.I.; KLIMOV, A.N.; KOVALEV, N.N.; KOSTENKO, M.P.; KOSTENKO, M.V.; NEYMAN, L.R.; PAVLOV, G.M.; RAVDONIK, V.S.; RUZIN, Ya.L.; SIDOROV, M.M.; SHRAMKOV, Ye.G.

Professor Sergei Vasil'evich Usov, 1905- ; on his 60th birthday. (MIRA 18:11)
Elektrichestvo no.11:86 N '65.

L 22149-66
ACC NR: AP6012968 SOURCE CODE: UR/0143/65/000/007/0130/0131

AUTHOR: Smirnov, V. S.; Kostenko, M. P.; Neyman, L. R.; Kostenko, M. V.; Domanskiy, B. I.; Zalesskiy, A. M.; Unov, S. V.; Ayzenberg, B. L.; Dubinskiy, L. A.; Aleksandrov, G. N.; Gribov, A. N.; Gruzdev, I. A.; Levinshteyn, M. L.; Mikirtichev, A. A.; Mikhaylova, V. I.; Ruzin, Ya. L.; Stefanov, K. S.; Khoberg, V. A.; Shcherbachev, O. V.

ORG: none

TITLE: Honoring the 80th birthday of Mikhail Davidovich Kamenskiy

SOURCE: Izvestiya vysshikh uchebnykh zavedeniy. Energetika, no. 7, 1965, 130-131

TOPIC TAGS: electric power engineering, electric engineering personnel, hydroelectric power plant, thermoelectric power plant

ABSTRACT: On 19 April 1965 Prof. Dr. Techn. Sci. Mikhail Davidovich Kamenskiy celebrated his 80th birthday and the 55th anniversary of his active work as a power expert. Mikhail Davidovich is a 1909 graduate of the Petersburg Polytechnic Institute - since his graduation he has been associated with this institue, now renamed Leningrad Polytechnic Institute, as an instructor. He is a major scientist and specialist in electric power grids and systems. He has been a major contributor to the establishment of the Leningrad Power Grid and various large thermal and hydro-

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ACC NR: AP5012968

electric power stations and an active participant in the design and construction of high- and low-voltage power systems in many cities of the Soviet Union. During the Siege of Leningrad in World War II he was a member of the Municipal Party Defense Committee. Since the war Mikhail Davidovich has been head of the Chair of Electric Power Grids and Systems at the Leningrad Polytechnic Institute and has been working on the methods of calculating the economic regimes of power system operation and on the problems of the present-day development of urban power systems. M.D. Kamenskiy has published more than 80 works, including both original studies as well as textbooks that are popular in the Soviet Union and abroad. He is the chairman of the Section on Power Systems and Grids under the Leningrad Division of the Scientific and Technical Division of the Power Industry and organizer of and participant in many scientific-technical conferences and meetings. His merits as an educator of a new school of Soviet power engineers are equally large. Orig. art. has: 1 figure. [JPRS]

SUB CODE: 10 / SUBM DATE: none

Card 2/2 dlo

DOMANSKIY, B.V.

Method of skeletal traction in fractures of the femur in children. Ortop., travm. i protez. 25 no.5:41-43 My '64. (MIRA 18:4)

1. Iz kafedry khirurgii detskogo vozrasta (zav. - prof. A.R. Shurinok) Kiyevskogo meditsinskogo instituta na baze khirurgicheskogo otdeleniya Kiyevskoy detskoy gorodskoy spetsializirovannoy bol'nitsy (glavnyy vrach - T.P.Novikova). Adres. avtora: Kiyev, Vozdukhoflotskoye shosse, d.28, Detskaya bol'nitsa khirurgicheskoye otdeleniye.

DOMANSKIY, B.I.; MOSKOV, M.M.

Autocollimation method for determining the optical constants of metals. Fiz. met. i metalloved. 1 no.3:567 '55. (MLRA 9:6)

1.Ural'skiy gosudarstvennyy universitet imeni A.M.Gor'kogo.
(Metals--Optical properties) (Optical measurements)

DOMANSKIY, L. K.

USSR/Engineering - Hydraulics, Power Stations May 52

"Overflow Diversion-Type Hydroelectric Power Station," A. A. Korolev, Cand Tech Sci, L. K. Domanskiy, Engr

"Gidrotekh Stroit" No 5, pp 36-38

Discusses method for use of river when high waters flood power-station buildings. Says arrangement permits concrete overflow weir in river bed to be replaced by earth dam, thus reducing cost of construction works. States that powerhouse was designed in 2 variations, illustrating both by drawings.

230T17

[redacted], L.K.; [redacted], M.V.

[redacted] design and structural features of the dam of the Krasnoyarsk Hydroelectric Power Station. Trudy Lengidroproekta no.1:5-20 '64. (MIRA 18:10)

DOMANSKIY, L.N., inzh.

The OPP-5.0 earcorn cleaner. Trakt. i sel'khozmash. no.2:40 F '64. (MIRA 17:3)

1. Spetsial'noye konstruktorskoye byuro Khersonskogo kombaynovogo zavoda.

VASIL'YEV, Yu.S., dots., kand. tekhn. nauk; VEL'NER, Kh.A., dots., kand. tekhn. nauk; GINDUS, D.O., inzh.; GOLOVACHEVSKIY, N.I., dots., kand. tekhn. nauk; GROMOV, A.I., inzh.; DOMANSKIY, L.K., inzh.; ISAYEV, Yu.M., inzh.; KULESH, N.P., dots., kand. tekhn. nauk; MIKHALEV, B.N., dots., kand. tekhn. nauk; MOROZOV, A.A., prof., doktor tekhn. nauk [deceased]; NALIMOV, S.M., st. nauchn. sotr., kand. tekhn. nauk; REZNIKOVSKIY, A.Sh., kand. tekhn. nauk; SVANIDZE, G.G., doktor tekhn. nauk; TANANAYEV, A.V., dots., kand. tekhn. nauk; KHAZANOVA, A.Z., inzh.; CHERNYATIN, I.A., st. nauchn. sotr., kand. tekhn. nauk; SHCHAVELEV, D.S., prof., doktor tekhn. nauk; YAGODIN, N.N., st. nauchn. sotr., kand. tekhn. nauk; LEONOVA, B.I., red.

[Utilization of water power] Ispol'zovanie vodnoi energii. Moskva, Energiia, 1965. 563 p. (MIRA 19:1)

DOMANSKIY, L.TS., inzh.; MEL'NIKONIS, A.A., inzh.

Carrying out earth and rock moving operations in second sequence foundation pits. Energ. stroi. no.41:27-31 '64. (MIRA 17:11)

DOMANSKIY, R.

Research on the reaction of spring barley to droughts. Fiziol. rast. 6 no.3:347-348 My-Je '59. (MIRA 12:8)

1. Department of Plant Physiology of Agricultural Academy, Poznan. (Barley) (Plants, Effect of aridity on)

RENDOSH, F. [Rendos, F.]; DOMANSKIY, R.; KOZMAL, F.; ZELNIK, A.; PAYTIK, I.

Production of furfurole and acetic acid by means of low-temperature pyrolysis of sawdust in a fluidized bed. Gidroliz. i lesokhim. prom. 17 no.7:12-13 '64. (MIRA 17:11)

1. Slovatskaya akademiya nauk (for Rendosh, Domanskiy, Kozmal). 2. Slovatskiy politekhnicheskiy institut (for Zelnik). 3. Zavod "Buchina" (for Pavtik).

DOMANSKIY, V.I. [Domans'kyi, V.I.]; ZHURAVSKIY, L.I. [Zhuravs'kyi, L.I.]; KISEL', I.M. [Kysil', I.M.]; KUPERMAN, I.S.

Methods for the measurement and regulation of gas filling of ideal mixing apparatus. Khim.prom. [Ukr.] no.1:72-77 Ja-Mr '64. (MIRA 17:3)

DOMANSKIY, V. Ye.

"Influence of production work specifications in grouping Hydronode causeway dams."

Dissertation for Candidate of Technical Sciences, Leningrad Polytechnical Institute im. Kalinin (LPI)

Subject: Hydroengineering building and construction

SO: Gidrotekhnicheskoye, stroitel'stvo, 12, 1946.

DOMANSKIY, V. YE.

PA 197T44

USSR/Engineering - Hydraulic Engineering, Materials Mar 51

"Surface Hardening of Concrete Structures and Its Depth," V. Ye. Domanskiy, Cand Tech Sci

"Gidrotekh Stroi" No 3, pp 13-16

Describes method for improving the surface layer of concrete, i.e., increasing its density and strength, with the aid of water-absorbing lining of concrete molds. Effect of water absorption by lining extends into concrete up to 10-12 cm and creates a more watertight and frost-resistant

197T44

USSR/Engineering - Hydraulic Engineering, Materials (Contd) Mar 51

layer. Expts were conducted in laboratories of VNIIG and presently the method is being tested under industrial conditions.

197T44

DOMANSKIY, V.Ye., inzhener.

Experience in building a large earthfill dam. Gidr.stroi.23 no.1: 10-13 '54. (MLRA 7:2)
(Ilme)

DOMANSKIY, Vitaliy Yefimovich; prof.; KORNILOV, A.M., red.; BORUNOV, N.I., tekhn.red.

[Construction of the Mingechaur complex of hydroelectric structures; Mingechaur and Varvarovka Hydroelectric Centers] Stroitel'stvo Mingechaurskogo kompleksa gidrotekhnicheskikh sooruzhenii; Mingechaurskii i Varvarinskii gidrouzly. Moskva, Gos.energ.izd-vo, 1960. 207 p. (MIRA 14:1)
(Mingechaur Hydroelectric Power Station)
(Varvarovka Hydroelectric Power Station)

DOMANSKIY, V. Ye.

Results of constructing the dam of the Mingechaur installation. Dokl.AN Azerb.SSR 16 no.1:23-27 '60. (MIRA 13:6)

1. Institut energetiki AN Azerbaydzhanskoy SSR. Predstavleno akad. AN Azerbaydzhanskoy SSR M.A. Kashkayem.
(Mingechaur Reservoir--Dams)

DOMANSKIY, V.Ye., prof.; SHUVAYEV, V.S., dotsent; ARNGOL'D, A.V.

"Design and operation of a tailings storage department of an ore dressing plant" by P.D.Evdokimova. Reviewed by IA.A. Rubinchik. Remarks on the book review by V.E.Domanskii, V.S. Shuvaev, A.V.Arngol'd. Reviewers' response. TSvet.met. 35 no.12:73-77 D '62. (MIRA 16:2)

1. Kuybyshevskiy inzhenerno-stroitel'nyy institut (for Domanskiy).
2. Kuybyshevskiy inzhenerno-stroitel'nyy institut (for Shuvayev).
3. Vsesoyuznyy institut po proyektirovaniyu organizatsiy energeticheskogo stroitel'stva (for Arngol'd).
(Tailings (Metallurgy)) (Evdokimova, P.D.)

KALISH, Samuil Ionovich; NAYDENKO, Ivan Sergeyevich; [illegible],
Konstantin Ivanovich; CHIZHOV, Vitaliy [illegible];
CHAYKA, Boris Nikolayevich; PERKAMOV, Aleksandr Ivanovich;
KOLANSKIY, Yuzef Gilyar'yevich; MALAKHOV, G.N., retsenzent

[Assembly, operation, and repair of hoisting equipment]
Montazh, ekspluatatsiia i naladka pod"emnykh ustanovok.
[By] S.I.Kalish i dr. Moskva, Nedra, 1964. [illegible] p.
(MIRA 18:3)

DOMANSKIY, Yuliy Ivanovich, inzh.; LEVCHENKO, Ya.V., inzh., red.; KUBNEVA, M.M., tekhn.red.

[The SMP-1 pyrotechnical pistol for fixing electric wiring to construction elements] Pirotekhnicheskii pistolet SMP-1 dlia zabivki elektromontazhnogo krepezha v stroitel'nye konstruktsii. Leningrad, Lening.r.dom nauchno-tekhn.propagandy, 1958. 11 p. (Informatsionno-tekhnicheskii listok, no.25. Stroitel'naia promyshlennost') (MIRA 12:8)
(Electric wiring--Equipment and supplies)

DOMANSKIY, Yuliy Ivanovich; BOGDANOVA, Zorya Nilovna; YEVSEYEV, R.Ye., red.

[Hand mandrels for driving-in dowels in the installation of electrical wiring and electrical equipment] Ruchnye opravki dlia zabivaniia diubelei pri montazhe elektroprovodok i elektroizdelii. Moskva, Energiia, 1964. 19 p. (Biblioteka elektromontera, no.130) (MIRA 17:12)

DOMANSKY, D.; JIRKU, J.

Surge stresses of high-voltage distributing transformers at chopped surge waves. p. 472

ELEKTROTECHNICKY OBZOR . (Ministerstvo tezkiho strojirenstvi a Ceskoslovenske vedecka technicka spolecnost pro elektrotechniku pri Ceskoslovenske akademii ved) Praha, Czechoslovakia. Vol. 48, no. 9, Sept. 1959.

Monthly list of East European Accessions (EEAI) LC, vol. 9, no. 1, Jan. 1960.

Uncl.

DOMANSKY, Eduard

Research on the operational conditions of diesel engines using propane-butane fluid gas. Ropa a uhlie 5 no. 9:284-287 S '63.

1. Ceskoslovenske zavody naftovych motoru, Research Institute of Naphtha Motors, Prague.

DOMANSKY, E.

"Omnivorous" diesel motors. Tekhnika 7 no.412 Ap '63.

DOMANSKY, K., Primar Dr.

Vagotomy in peptic ulcer persisting following gastric surgery.
Cas. lek. cesk. 91 no.27:804-806 4 July 52.

1. Z chirurgickeho oddeleni nemocnice KUNZ v Ceskych Budejovicich.
(PEPTIC ULCER, surgery,
vagotomy in ulcer persisting after gastrectomy)
(NERVES, VAGUS, surgery,
vagotomy in peptic ulcer persisting after gastrectomy)

DOMANSKY K.

EXCERPTA MEDICA Sec.14 Vol.11/8 Radiology Aug57.

1343. DOMANSKÝ K. and TOMEČKA M. Chir. Odd. a Tuberk. Odd., Českých Budějovicích. Méně časté nádory mezihrudní. Less frequent mediastinal tumours ROZHL. TUBERK. 1956, 26/8 (409-413) Illus. 8

The following unusual tumours of the mediastinum were removed by surgery: cystic fibroma, which originated from the pericardium, an aberrant struma in the anterior mediastinal space with malignant degeneration, a parasternal liparocele, a neurinoma of the anterior mediastinum, one chondroma in the anterior and one in the posterior mediastinum and a sarcoma. The experience of the authors shows that in any case of mediastinal tumour an operation has to be performed early because these tumours do not respond favourably to radiation. Radiation has only a significance for differential-diagnostical purposes. The patient with sarcoma of the anterior mediastinum is well and without metastases 4 yr. after surgery.

Boehm - Isny (XV, 5, 9, 14, 16)

DOMANSKY, K.

Complications of retrogeserian neurotomy according to Dandy. Cesk. neur. 20 no.4:219-224 June 57.

1. I chirurgika klinika lekarske fakulty KU se sidlem v Plzni, prednosta doc. Dr K. Domansky.
(TRIGEMINAL NEURALGIA, surg.
retrogasserian neurotomy, Dandy method, compl. (Cz))

DOMANSKY, Karel; HOLIK, Frantisek; LINHARTOVA, Alena

Pseudocysts of the thymus. Rozhl. chir. 40 no.7:483-488 Jl '61.

1. I chirurgicka klinika, prednosta doc. dr. K. Domansky centralni rtg oddeleni, prednosta doc. dr. F. Holik Sikluv patologicko-anatomicky ustav lekarske fakulty University Karlovy v Plzni, prednosta prof. dr. J. Vanek.

(THYMUS GLAND dis)

Domansky, L.

AGRICULTURE

COMPEL, J.; DOMANSKY, L. ; PANES, D.

Analysis and economic evaluation of building of building and construction investments from the point of view of vertical and horizontal arrangement of storage rooms. p. 943.

Vol. 31, no. 12, Dec. 1958.

Monthly Index of East European Accessions (EEAI) LC, Vol. 8, No. 4, April 1959

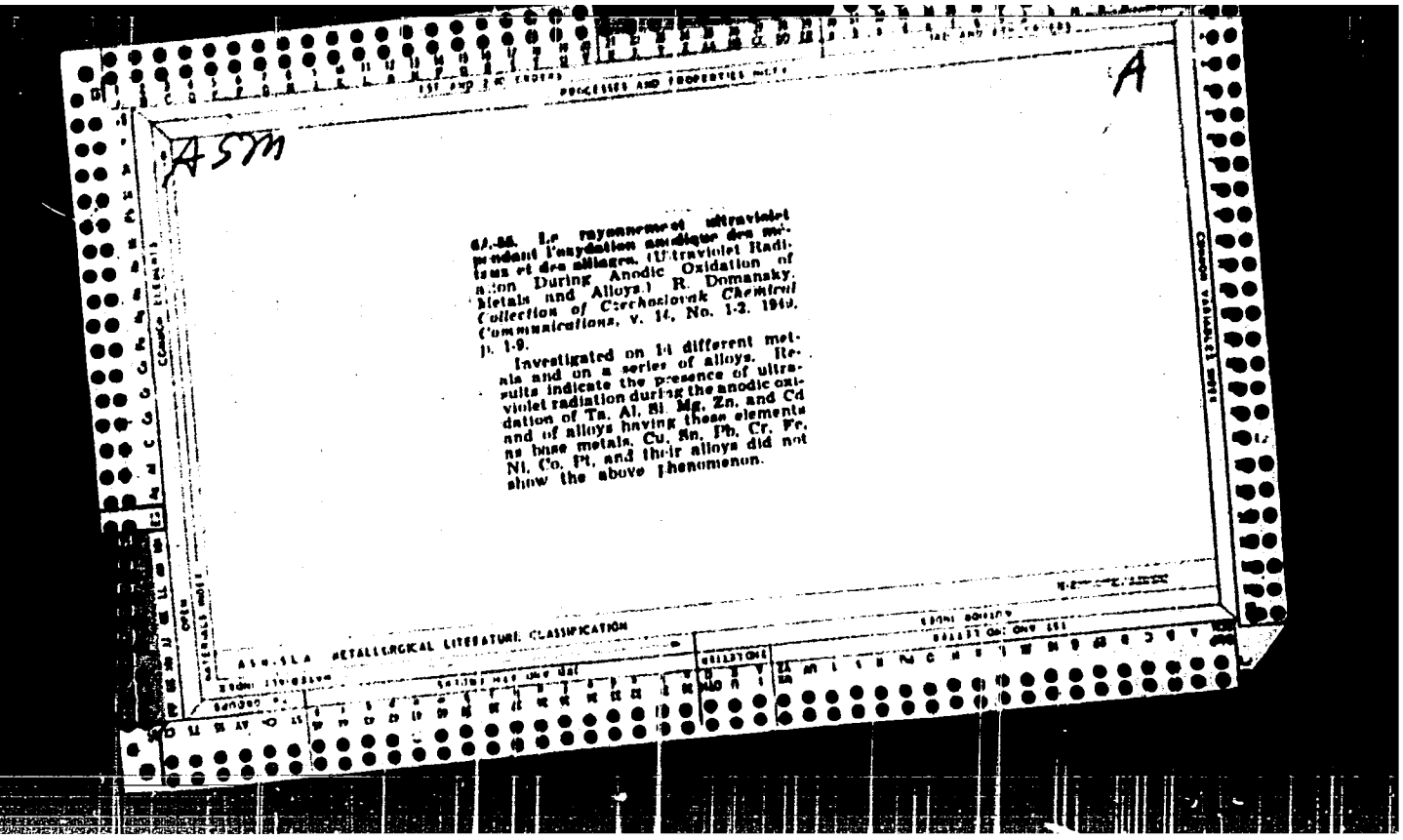
VELEBIL, M., inz.; KOLAR, K., inz.; DOMANSKY, M., inz.; SOUHRADA, J., inz.

Main trends in the complex mechanization of cattle and swine breeding. Zemedel tech 9 no.3:221-238 Je '63.

1. Vyzkumny ustav zemedelske techniky, Repy u Prahy.

DOMANSKY, R.

"Theory and applications of ultraviolet spectroscopy" by H.H. Jaffe, M. Orchin. Reviewed by R. Domansky. Chem zvesti 18 no.2: 155 '64.



M. A.

On the Effect of Electrolytic Concentration on the Generation of Ultra-Violet Rays During Anodic Oxidation of Aluminium. R. Domanský (Coll. Trav. Chim. Tchécoslov., 1949, 14, (8/10), 444-446).---(In French). The intensity of the ultra-violet rays which appear during anodic oxidation of aluminium decreases with lower electrolyte concentration (< N/750). It is suggested that this is due to the absence of formation of oxide films.---V.K.

DOMANSKY, R.

DOMANSKY, R. and BERGER, V. "Analytic tracing of the process of formaldehyde and phenol condensation." p. 441. (Vol. 5, no. 8, Oct. 1951. Chemicke Zvesti. Bratislava.)

SO: Monthly List of East European Accessions, Vol. 3, No. 6, Library of Congress, June 1954. Uncl.

DOMANSKY, R.

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

International Polarographic Congress. 1st, Prague, 1951

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

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

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

COVERAGE: The book is a collection of reviews and original papers read at the International Polarographic Congress held in Prague in 1951. Uses of polarography in organic and inorganic analysis, biochemistry, medicine, and industrial chemistry are discussed. In the section, Reviews Read at the Congress, Russian and either German or English translations of each review are presented. In the section, Original Papers Read at the Congress, only those translations in Russian, German, and English which have not been published in Volume I are presented. The following scientists participated in the opening of the Congress: Professor Wiltor Kemula, Dean of the Faculty of Sciences, Warsaw; Doctor Jaromir Dolansky, Minister of Planning; Professor Jaroslav Herovsky, Chairman of the Congress; and Professor Jaroslav Pukatko, Chairman of the Center for Scientific Research and Technical Development. References follow each paper.

Card 8/14

DOMANSKY, RADISLAV Czech CA: 47:11080

with JIRI HOSTOMSKY

Slov. vysoka skola tech., Bratislava, Czech.

"Determination of formic and acetic acids in the solutions after prehydrolysis of wood."

Chem. Zvesti 6, 37-43 (1952)

CA

Analytical Chemistry - 7

Potentiometric determination of furfural. R. Domanský (Wood Research Inst., Bratislava, Czech.). *Chem. Listy* 46, 680-1(1952).—The detn. of *furfural* (I) is carried out by titrating, with an aq. soln. of I, contg. a known quantity of Br liberated from $KBrO_3$ + KBr with HCl. To 20 ml. of a soln. contg. in 1 l. 1.392 g. $KBrO_3$ and 10 g. KBr add 25 ml. 2.5% soln. of $(NH_4)_2MoO_4$, 60 ml. 10% HCl, and 80 g. ice. Cool the soln. to 0°, and titrate with an aq. soln. contg. approx. 1 g. I in one l. The titration is followed potentiometrically with Pt and calomel electrodes. The potential drop is about 600 mv. M. Hudlický

DOMANSKY R.

DOMANSKY, R.

Ternary system: furfural-water-ethanol. p.765 (Chemicke Listy. Praha. Vol. 46, No. 12, Dec. 1952)
SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 6, June 1955, Uncl.

DOMANSKY, RADISLAV

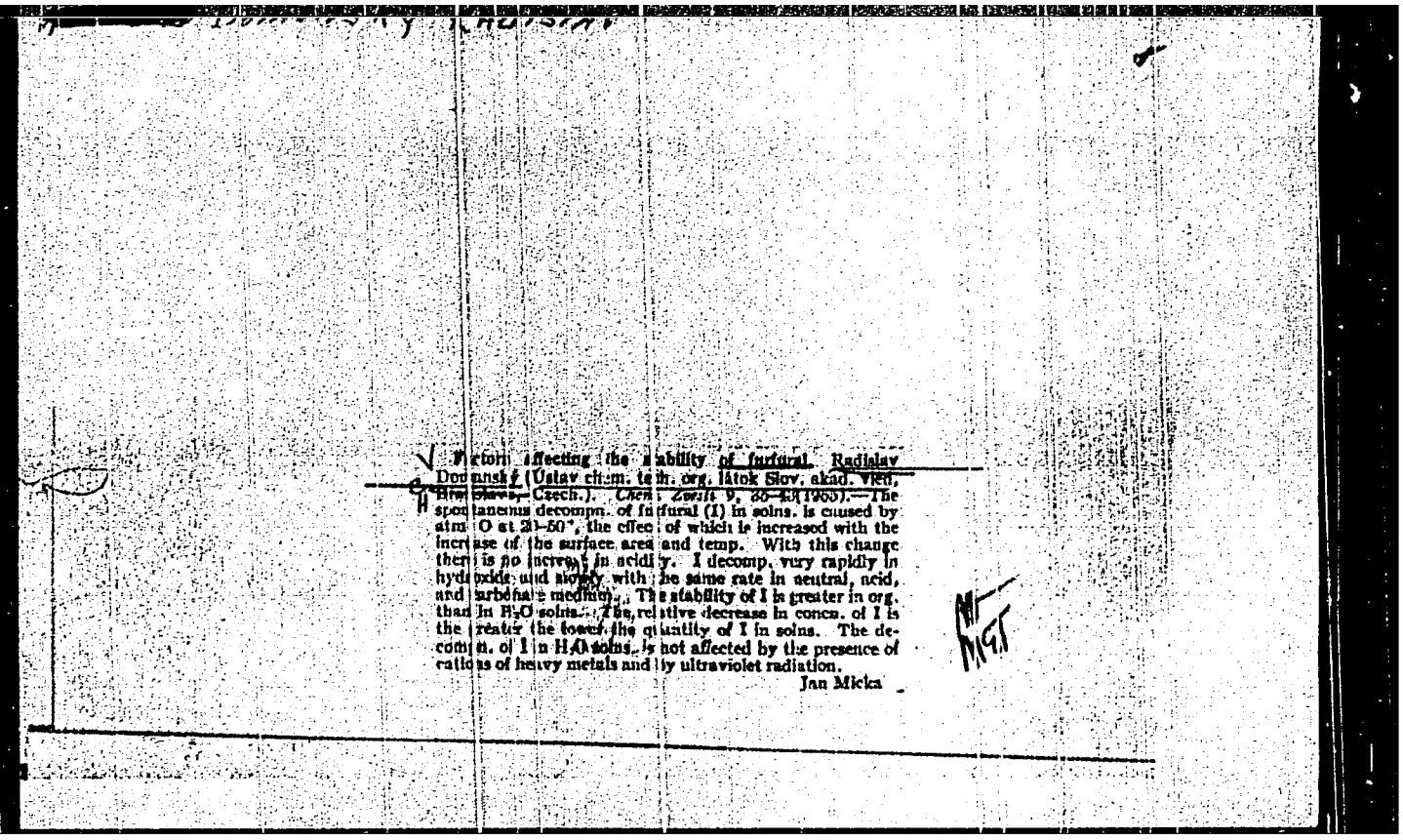
Kinetics of condensation of pyrocatechol with formaldehyde in solution of sodium hydroxide. Radislav Domanský (Drevársky výskumný ústav, Bratislava, Czech.). *Chem. Zvesti* 7, 179–87 (1953).—At higher temps. (35°, 40°, 45°, and 50°), the condensation (I) of pyrocatechol with $(CH_2O)_n$ (mol. ratio 1:1) in NaOH is a 1st-order reaction. At lower temp. (30°), I is a 2nd-order reaction. The relation of reaction kinetics to temp. was compared with the Arrhenius equation and the value of activation energy of condensation calcd.: $E = 19020$ cal. There is a considerable dependence of the reaction rate constant on the concn. of NaOH.

Jan Micka

DOMANSKY, R.

"Aging Schweizer's reagent." Chemicke Zvesti, Bratislava, Vol 7, No 10, Dec. 1953, p. 634.

SO: Eastern European Accessions List, Vol 3, No 11, Nov. 1954, L.C.



Factors affecting the stability of furfural. Radislav Domanský (Ústav chem. tech. org. látok Slov. akad. vied, Bratislava, Czech.). *Chem. Zvesti* 9, 85–8(1955).—The spontaneous decompn. of furfural (I) in solns. is caused by atm. O at 20–50°, the effect of which is increased with the increase of the surface area and temp. With this change there is no increase in acidity. I decomp. very rapidly in hydroxide and slowly with the same rate in neutral, acid, and carbonate medium. The stability of I is greater in org. than in H_2O solns. The relative decrease in concn. of I is the greater the lower the quantity of I in solns. The decomp. of I in H_2O solns. is not affected by the presence of cations of heavy metals and by ultraviolet radiation.

Jan Micka

DOMANSKY RADISLAV

A new method of determining sodium sulfide in sulfate liquors. Radislav Domansky (Slovak. akad. vied, Bratislava, Czech.). *Chem. Zvesti* 9, 568–83(1955); cf. *C.A.* 49, 8043i. The method is potentiometric and is based on the titration of Na_2S by an ammoniacal soln. $AgNO_3$ or by an aq. soln. of $HgCl_2$ with Pt indicator electrode. The results are not affected by various salts, e.g. OH^-, CO_3^{2-}, SO_3^{2-}, $S_2O_3^{2-}$ and SO_4^{2-}. They compare favorably with the results of the standard TAPPI method but the new method can be carried out in much less time.

Jan Micka

DOMANSKY, RADISLAV

3

CZECH

Conductometric determination of alkali sulfide, hydroxide, and carbonate in mixtures. Radislav Domanský (Slov. akad. vied, Bratislava, Czech.) Chem. Listy 49, 780–90 (1955).—A new conductometric detn. of alkali sulfide, hydroxide, and carbonate in the presence of one another is based on ppts. with 0.6*N* $AgNO_3$. The content of S^{--} can be detd. with relatively little error; the detn. of CO_3^{--} is less accurate. Low content of OH^- decreases the accuracy of the detn. of OH^- and S^{--}; therefore it is advisable to add a known quantity of NaOH prior to titration of samples having low content of OH^-. The presence of $Na_2S_2O_3$ interferes.

M. Hudlický

DOMANSKY, R.

3

2576. Potentiometric [illegible] of sulphide in black liquor. R. Domanský (Bratislava, Czechoslovakia). *Chem. Tech. Berlin*, 1954, 6 (12), 731–733.—The sample (100 ml) is diluted with an equal vol. of water and titrated with either 0·1 *N* ammoniacal (2·5% aq. NH_3) $AgNO_3$ or 0·1 *N* aq. $HgCl_2$ (each gives equally accurate results), a platinum indicator electrode and a S.C.E. being used. A little ethanol should be added to the sample to avoid coagulation of org. compounds on the electrodes, etc. The method is much more rapid and more accurate than the TAPPI method; it gives results ≃ 6% higher as it avoids the H_2S losses of the TAPPI method. Its accuracy is not affected by the presence of OH^-, CO_3^{2-}, SO_4^{2-}, $S_2O_3^{2-}$, SO_3^{2-} or Cl^-.

I. L. WHITEHEAD

DOMANSKY, R.

B-8

CZECHOSLOVAKIA/Physical Chemistry - Thermodynamics, Thermochemistry, Equilibria, Physical-Chemical Analysis, Phase Transitions.

Abs Jour : Ref Zhur - Khimiya, No 7, 1958, 20601

Author : R. Domansky, F. Rendos.

Inst :

Title : Solubility of Sulfure Dioxide in Aqueous Ammonium Solutions

Orig Pub : Chem. zvesti, 1957, 11, No 8, 453-460

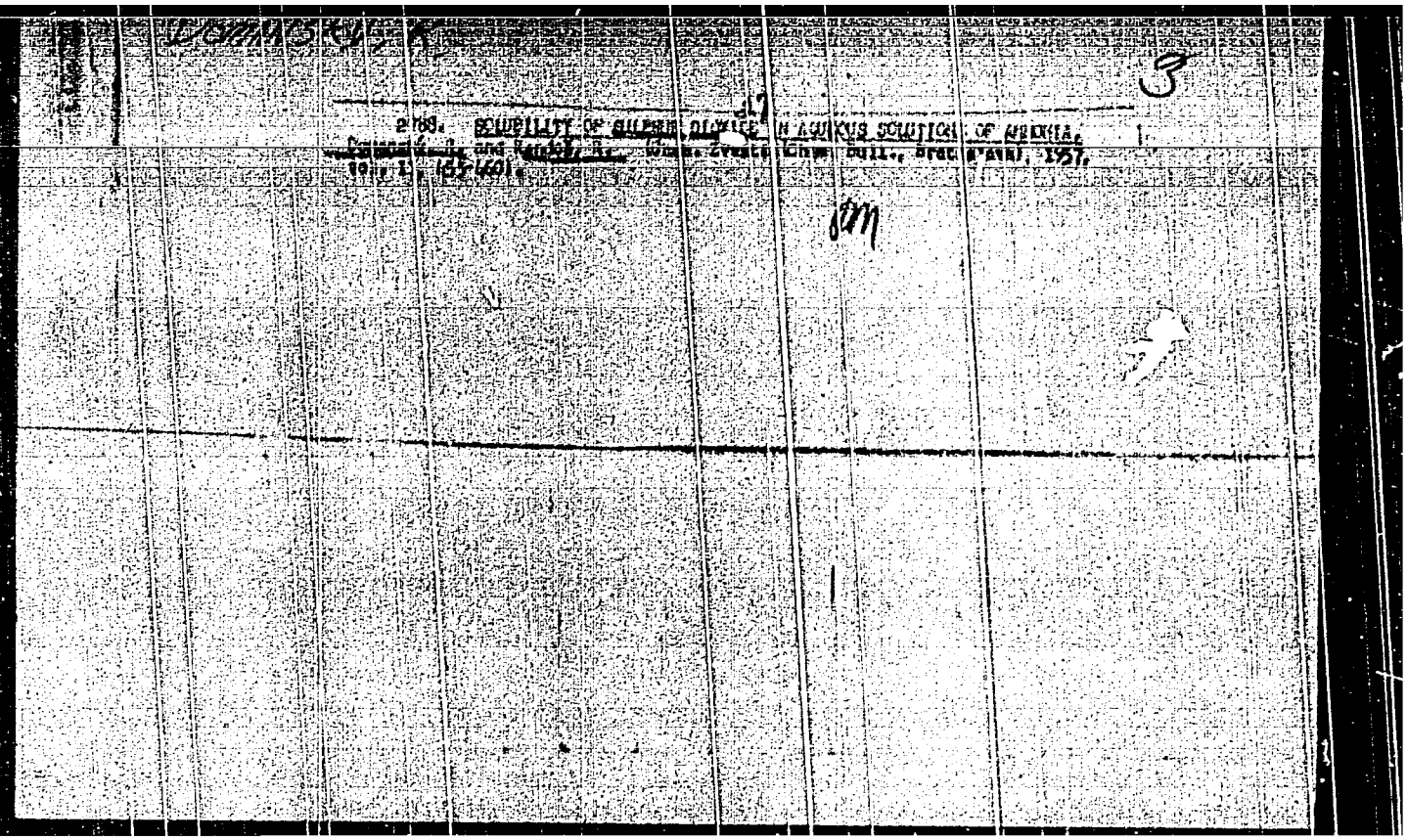
Abstract : The solubility of SO_2 in 0.5 to 2.0%-ual ammonium solutions in water was measured at 15 to 30°. The equipment and the methods of measurement are described. The dissolution of SO_2 follows Henry's law. The solubility is less in diluted NH_4HSO_4 solutions than in water. The solubility of SO_2 decreases to a minimum with the rise of ammonium sulfite concentration, after which it increases again.

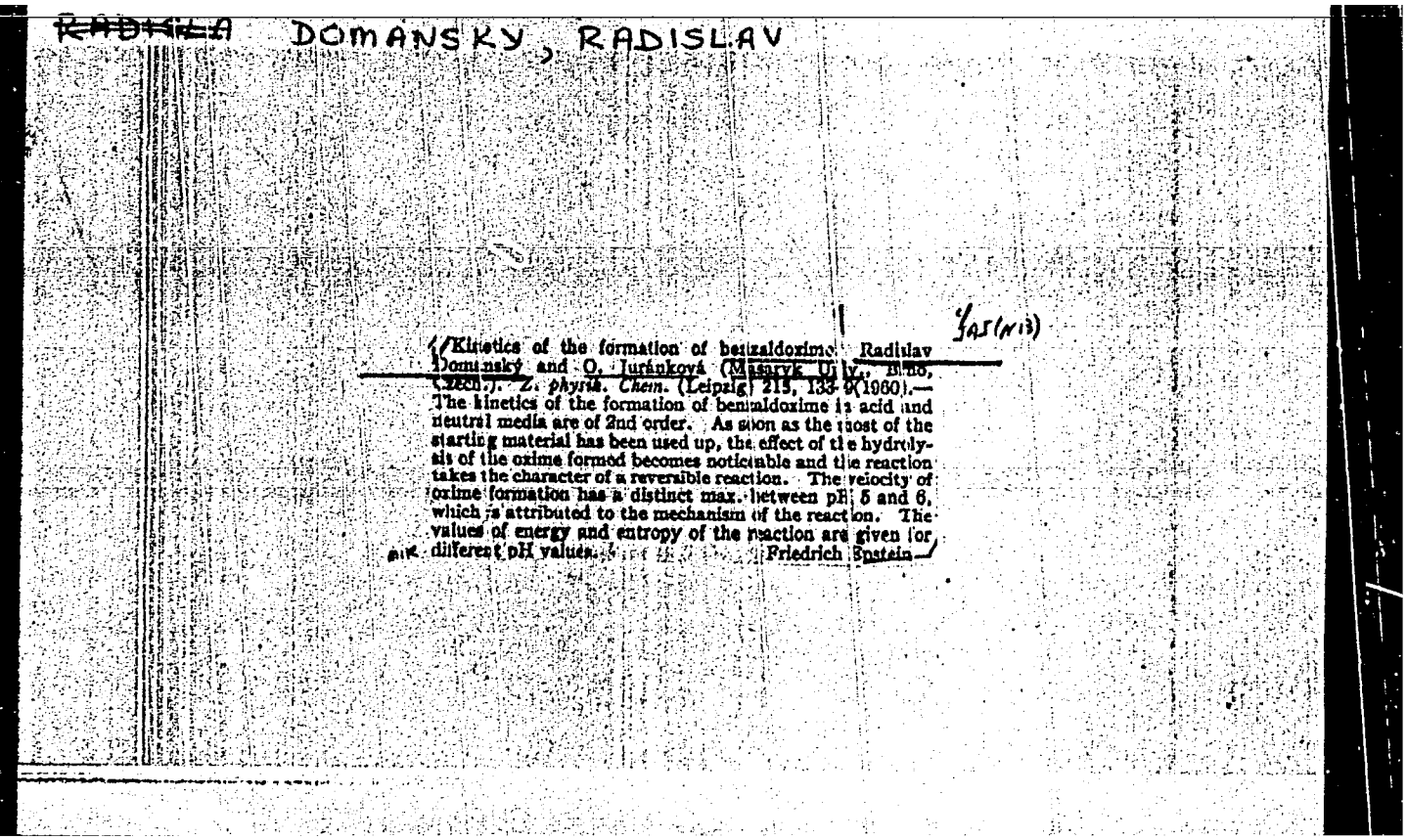
Card 1/1

DOMANSKÝ, R.

Determination of total sodium in sulfate lyes by means of the flame photometer. p.37. CHEMICKÉ ZVESTI. (Slovenské akadémia vied a Spolok chemikov na Slovensku) Bratislava. Vol. 10, no.1, Jan. 1956.

SOURCE: East European Accessions List. (EEAL), Library of Congress Vol, 5, no. 12, December 1956.





~~RADILA~~ DOMANSKY, RADISLAV

Kinetics of the formation of benzaldoxime. Radislav Domanský and O. Jurénková (Masaryk Univ., Brno, Czech.). *Z. physik. Chem.* (Leipzig) 215, 133-9(1960).—The kinetics of the formation of benzaldoxime in acid and neutral media are of 2nd order. As soon as the most of the starting material has been used up, the effect of the hydrolysis of the oxime formed becomes noticeable and the reaction takes the character of a reversible reaction. The velocity of oxime formation has a distinct max. between pH 5 and 6, which is attributed to the mechanism of the reaction. The values of energy and entropy of the reaction are given for different pH values. Friedrich Epstein

DOMANSKY, Radislav, do., inz., dr.

Basic research on wood in Czechoslovakia. Drevo 17 no.6:171-172 Je '62.

1. Ustav dreva, celulozy a chemickych vlaken, Slovenska akademia vied, Bratislava.

DOMANSKY, R.

"Chemical thermodynamics" by J.Klotz. Reviewed by R. Domansky. Chem zvesti 18 no.10:798 '64.

"Introduction to the chemical thermodynamics by J. Klotz. Reviewed by R.Domansky. Ibid.:799

DOMANUSOWA, S.

Rubber Abst.
Vol. 32 No. 1
Jan. 1954
Synthetic Rubbers and Like Products

115. **Influence of agents, which lower the surface tension of water, on the course of the emulsion polymerisation of vinyl chloride.** W. ZIELINSKI and S. DOMANUSOWA. *Przemysl chem.*, 1952, 8, 471–2; *Chem. Tech., Berlin*, 1953, 5, 015–6. A small addition of ethylene oxide to the dispersion medium facilitates the emulsion polymerisation of vinyl chloride with hydrogen peroxide as catalyst. The effect of the surface-active compound on the rate of polymerisation and yield is discussed in relation to the polar nature of the monomer, and results of experiments are given. 3S2[121.12]11

DOMANUSCWA, S.

(2)

Chemical Abstracts
May 25, 1954
Organic Chemistry

Preparation of melamine from dicyandiamide. A. Pilc and S. Domanuscwa. *Przemyl Chem.* 31(8), 261–62 (1952).—Some of the most frequently used methods of prepg. melamine from dicyandiamide have been examd. by expt. and a new method of prepg. tech. melamine (more than 99% pure) in a simple app. is presented. 18 references.
Frank Gonet

KONCZ, Istvan, a muszaki tudomanyok kandidatusa; DREISZKER, Maria; SZENTPETERY, Tibor; BUDINCSEVITS, Andor; DOMANY, Andras; WALDHAUSER, Ilona

Problems of surface stress and welding possibilities of metals used by the electronic-tube industry; also, remarks by A.Budincsevits, A.Domony, and I.Waldhouser. Muszaki kozl MTA 26 no.1/4:185-198 '60. (EEAI 9:10)

1. Hiradastechnikai Ipari Kutato Intezet (for Dreiszker and Szentpetery)
(Electron tubes) (Metals) (Welding)

DOMANY, Gyorgy

SZABO, Emil; GORCS, Jeno; DOMANY, Gyorgy.

Vaginal smears in cytologic research in determination of menstrual cycle and amenorrhea. Magy.noorv.lap. 18 no.2:111-117 Mar 55.

1. A Pecsi Orvostudomanyi Egyetem Szuleszetti Klinikajanak Kozlemenye (Igazgato: Lajos Laszlo dr. egyet. tanar)

(VAGINAL SMEARS,
determ. of cycle & differ. diag. of amenorrhea)
(AMENORRHEA, differential diagnosis,
vaginal smears)

GATI, Istan; KISS, Dezso; DOMANY, Gyorgy; HUSVET, Ferenc; HALVAX, Laszlo

Importance of extensive liquid intake in prevention of thromboembolism according to coagulation tests. Magy. noorv. lap. 18 no.3:167-170 May 55.

1. A Pecsi Orvostudomanyi Egyetem Szuleszeti es Nogyogyaszati Klinikajanak kozlemenye (Igazgato: Lajos, Laszlo dr. egyetemi tanar).
(THROMBOEMBOLISM, prevention and control, liquid intake, coagulation test control.)

DOMANY, Gyorgy; GATI, Istvan; NAGY, Dezso; DOMANY, Sandor

Intravenous application of Glanduitrin in the expulsion stage.
Magy.noorv.lap. 27 no.1:24-28 J '64.

1. A Pecsi Orvostudomanyi Egyetem Szuleszeti es Nogyogyaszati Klinikajanak (Igazgato: Lajos Laszlo dr. egyet. tanar) kozlemenye.

*

Mechanics, [illegible] Powders

R.T.A

621.386 : 615.849 : 77.088.7

931

Tylatycki M., Domanus J. Micro-Radiography.
„Rentgenografia małoobrazkowa". Warszawa 1949, [illegible] Inst. Nauk.-Wyd., 8°, pp. 195, 120 figs.

The importance of micro-radiography in mass examination of the population. Organisation of microphotographic mass examinations. Interpretation of micro-radiograms. Historical review. Equipment. Installation design. The protection of operators. Photographic technique. Apparatus handling. Defects and repairs. Film records. Future development of micro-radiography.

DOMANUS, JOZEF.

Domanus, Jozef. Nowe kierunki roxwoju techniki rentgenowskiej. (Wyd. 1.) Warszawa, Panstwowe Wydawn. Naukowe, 1952. 91 p. (New trends of development in X-ray technique. Illus., bibl.)

SO: Monthly list of East European Accessions, LC, Vol. 3, No. 1, Jan. 1954, Uncl.

DOMANUS, Jozef.

Application of introviser of Steinhaus in field roentgenologic apparatus. Postepy radiol.Vol.1:205-212 1954.

1. Z Zakladu Radiologii Przemyslowej Instytutu Elektrotechniki w Warszawie, Kierownik: mgr. inz. J. Domanus.
(FOREIGN BODIES, diagnosis,
x-ray introviser of Steinhaus)
(ROENTGENOGRAPHY, apparatus and instruments,
introviser of Steinhaus for localization of for.bodies)

DOMANUS, J.

Protection against X and γ rays. p.345.
OCHRONA PRACY; BEZPIECZENSTWO I HIGIENA PRACY. (Ministerstwo Pracy i Opieki Spolecznej i Centralny Instytut Ochrony Pracy) Warszawa
Vol. 9, no. 11, Nov. 1955

So. East European Accessions List Vol. 5, No. 1 Jan. 1956

DOMANUS, J.; RADWAN,M.

Electric welding in the service of heavy industry. p. 133

Railroad rolling stock at the 24th Poznan International Fair. p. 156
PRZEGLAD SPAWALNICTWA (Stowarzyszenie Inzynierow i Technikow Mechnikow Polskich Instytut Spawalnictwa) Warszawa. Vol. 7, no. 6, June 1955

SOURCE: East European Accessions List, (EEAL), Library of Congress, Vol. 4, no. 12, December 1955

DOMANUS, Jozef

Domanus, Jozef: "Developmental Trends in Radiology," Nauka Polska, Rok IV, No 2/3 (14-15), Warsaw, 1956.

POLAND

DOMANUS, J.:

"Investigation of the Relative Dielectric Strength of Freon Under Variable Pressure."

SO: Prace Instytutu Elektroteknyki, Vol. 5, No. 15, 1956.

DOMANUS, JOZEF

POLAND/Physical Chemistry. Isotopes. B-7

Abs Jour: Ref Zhurnal Khimiya, No 5, 1957, 14580

Author : Jozef Domanus
Inst :
Title : Tendency of Development of Radiobiological Technique

Orig Pub: Nauka polska, 1956, 4, No 2-3, 337-349

Abstract: Review; the problems of wider penetration of radioactive isotopes and x-ray radiation in various fields of sciences and engineering in the People's Republic of Poland are discussed.

Card 1/1

6049 532.217:539.166

Domanus J., Kamiński B. Liquid Level Regulation by Means of Gamma Rays.

„Regulacja poziomu cieczy przy pomocy promieniowania gamma". Pomiary, Automatyka, Kontrola. No. 11, 1958, pp. 508—512, 8 figs., 2 tabs.

The weakening of gamma rays passing through an absorbing medium proceeds according to the formula

$$J = J_{\infty} e^{-\mu x}$$

where J_{∞} denotes intensity of radiation incident on a layer of material possessing thickness x, J — the intensity after passage through this layer, μ — the linear coefficient of radiation weakening (in cm^{-1}). This law was applied for regulation of the level of liquids. When the level of a liquid falls below the line radiation source-Geiger Müller counter, then the radiation will be weakened only by the wall of reservoir and the counter receives radiation of intensity J. If, however, the level of the liquid rises so much that it passes the line source-counter, then the radiation will be further weakened by the layer of liquid, and its intensity will fall to the value J_2. This difference of intensities of radiation $J_1 - J_2$ can be used for regulation of the level. The counters used for measuring the intensity of radiation indicate this in the form of electric current impulses. The difference in intensity of current received from the radiation counter is used for controlling the regulation system. In the device here described, cobalt 60 was used as a source of radiation. The accuracy of liquid level regulation in the tank in conditions of continuous work obtained by the authors was ± 5 mm.

DOMANUS, J.

CATEGORY :

ABS. JOUR. : RZKhim., no. 20 1959, No. 71740

AUTHOR : Domanus, J.; Kaminski, B.

INST. :

TITLE : The Use of Radioactive Isotopes in the Regulation of Fluid Level

ORIG. PUB. : Przem. chem., 1958, 37, No 10, 673-676

ABSTRACT : The Warsaw Institute of Electrical Engineering has developed a model of level regulator which is based on the absorption of gamma-radiation by a layer of the liquid being regulated. The regulator consists of a source and a receptor of gamma-radiation, installed along the same horizontal, straight line, on opposite sides of the collector of the liquid. Source and receptor are mechanically linked to each other and can be moved up and down the collector, and positioned at the desired level. When the liquid level drops below the preset mark the receptor is exposed to a certain amount of radiation, which after suitable transformation and amplification, actuated

CARD: 1/2

COUNTRY : Poland
CATEGORY :

AUS. JOUR. : KOKhim., No. 20 1959, No. 71740

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : the pump transfers the liquid to the collector. Accuracy of regulation is of ± 5%. With a steel collector 700 mm in diameter, having walls 1 mm thick, the radiation source that is used is Co^{60}, of intensity equivalent to 1 mg Ra, in the form of a wire 0.5 mm in diameter and 2 mm long. A Geiger-Muller counter is used as receptor. -- Yu. Skorobogaty.

CARD: 2/2

COUNTRY : Poland
CATEGORY : Chemical Technology. Chemical Products and Their Applications. Safety and Sanitation
ABS. JOUR. : RZKhim., No. 20 1959, No. 71676

AUTHOR : Brzezina, J.
INST. :
TITLE : Protection Against Radiation of Isotopes

ORIG. PUB. : Przem. chem., 1958, 37, No 11, 650-659

ABSTRACT : Brief description of the mechanism of biological action of radioactive isotopes (RI); maximum permissible concentrations of different RI in water and air, are listed; methods of protection against radiation are considered (shielding, remote handling, control of daily irradiation dosage, chemical means of protection of human organism, dosimetry). Bibliography 26 references.
T. Brzhevskaya.

CARD:

DOMANUS, JOZEF.

Techniczne problemy stosowania izotopow promieniotworczych. [Wyd. 1.] Warszawa, Poland.

Panstwowe Wydawn. Techniczne, 1959. 439 p.

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

Uncl.

DOMANUS, J.

T. Radoszewski's Techniczne laboratorium radiologiczne (Technical Radiological Laboratory); a book review. p. 34

OCHRONA PRACY. (Centralna Rada Zqiazkow i Centralny Instytut Ochrony Pracy)
Warszawa, Poland
Vol. 14, no. 6, June 1959

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

DOMANUS, JÓZEF

P/046/60/005/03/03/006

AUTHORS: Domanus, Józef; Osuchowski, Bogusław

TITLE: The Concept of "Gram-Equivalent of Radium" for Non-Point Isotopic Gamma-Ray Sources /9

PERIODICAL: Nukleonika, 1960, Vol. 5, No 3, pp 143 - 148

TEXT: The English-language article contains an exposition presented on October 16, 1959 at the Symposium on Metrology of Radionuclides of the International Atomic Energy Agency, Vienna. The authors advocate the determination and introduction of an international gram-equivalent of radium for non-point isotopic gamma-ray sources. The determination of the activity in Curies is not satisfactory for gamma-ray sources used in radiography and teletherapy. These sources cannot be considered as point sources because of their relatively heavy activities and large dimensions. The effect of autoabsorption in the source does not permit determination of the latter's output directly from the known activity and ionization constant. The concept of the gram-equivalent of radium is more convenient for practical reasons, because it makes possible an instant calculation of dose-rates for a given distance from the source in question. The specification method for

Card 1/2

P/046/60/005/03/03/006

The Concept of "Gram-Equivalent of Radium" for Non-Point Isotopic Gamma-Ray Sources

the gram-equivalent of non-point radium sources should be clearly determined There are two different views of the subject. The authors present two different ways of formulating the concept of the radium gram-equivalent, suggest clarification of the difference, and an unequivocal definition and introduction of the gRa concept for activity determination of gamma-ray sources used in radiography and teletherapy.

ASSOCIATIONS: Nuclear Energy Commission; Polish Standards Committee, Warsaw

PRESENTED: October 16, 1959

SUBMITTED: October 20, 1959

Card 2/2

85444

P/046/60/005/004/004/007
A222/A026

21.5300

AUTHORS: Domanus, Józef; Halski, Leszek

TITLE: Radiation Protection 19 Measurements of Gamma Radiation of Various Radioisotopes by Means of the Photographic Method

PERIODICAL: Nukleonika, 1960, Vol. 5, No. 4, pp. 227 - 238

TEXT: The German-language article is a report presented at the 2nd Conference on Scientific and Applied Photography in September 1959 in Budapest. The paper deals with test films as a means of radiation safety in industrial defectoscopy. General data (half life, radiation intensity, thickness of materials subjected to defectoscopy tests) of gamma-type radioisotopes (Tm^{170}, Ir^{192}, Cs^{137}, Co^{60}, $Eu^{152+154}$, Ra^{226}) used in pertinent tests are presented in Table 1. Various films and cover foils were subjected to tests in order to establish the film and foil combination with the most suitable exposure-density curve. The tests involved all pertinent films used in Poland, such as Foton Roentgen (16° CUK), Foton Roentgen Super (44° CUK), and the GDR-made Agfa Texo R and Agfa Texo S. Among amplification foils tested were lead foils (0.2 + 0.2 mm Pb), salt foils Perlux M 1000 and Perlux M 2000. All irradiated films were developed for 5 mi-

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P/046/60/005/004/004/007
A222/A026

Radiation Protection Measurements of Gamma Radiation of Various Radioisotopes by Means of the Photographic Method

nutes at 20°C in a "Foton Roentgen" developer. The dependence of exposure density on doses (exposure-density curves) for various films and film-and-foil combinations are presented in Figures 3 through 9. The identification numbers of the curves are code numbers of film and/or film-foil combinations as explained in Table 2. The conclusions of the test were: 1) No ideal exposure-density curve was established for any of the film-foil combinations. (The ideal film-and-foil combination was expected to have a straight characteristic section for doses between 100 and 1,000 mr and film densities between 1 and 2). A possible explanation for the failure is that only a few kinds of film were at hand. 2) The use of salt foils produced excessive contrast and shifted the test range of from 100 to 1,000 mr into an unfavorable exposure-density range. 3) Roentgen films used without amplification foils did not produce satisfactory results, because the densities obtained were lower than D = 1. 4) Lead foils were established as useful, because in conjunction with films of proper sensitivity they produced exposure densities within the required test range. The comparison of exposure-density curves of various films in conjunction with lead foils 0.2 + 0.2 mm (Fig. 9) shows that

85444

P/046/60/005/004/004/007
A222/A026

Radiation Protection Measurements of Gamma Radiation of Various Radioisotopes by Means of the Photographic Method

Foton Roentgen Super films are most suitable for dosimetric purposes. A dose of 100 mr produces the relatively greatest exposure density, a dose of 400 mr induces the smallest density variations for different isotopes and the desired density is obtained at a dose of 1,000 mr with a relatively low dispersion. It was further established that the film test method makes possible only approximated irradiation checks of persons working with several kinds of isotopes at a time, because of different film response to irradiation by different isotopes. On the other hand, the method ensures satisfactory and accurate results in case of only one type isotope or isotopes of similar radiation energies. A radiation test film cartridge made by the Instytut Elektrotechniki (Institute of Electrical Engineering) is shown in Figure 1. There are 3 tables and 9 figures.

ASSOCIATION: Instytut Elektrotechniki, Warszawa, Zakład Radiologii Przemysłowej (Institute of Electrical Engineering, Warsaw, Department of Industrial Radiology)

SUBMITTED: October 20, 1959

Card 3/3

DOMANUS, J.

Distr: 4E3d

19

4

Large Co^{60} sources applied to γ-radiography of metals. J. Domanus and B. Osuchowski (Inst. Electrotech., Warsaw). *Nukleonika* 5, 231-9(1960)(in English).— Sources with activities >750 c. (1000 g. Ra) are not suitable for samples thicker than 300 mm. J. Stecki

DOMANUS, Jozef; OSUCHOWSKI, Boguslaw

On the problem of the concept of the radium gram equivalent in non-point isotope sources of gamma rays. Polski przegl. radiol. 25 no.4: 405-410 '61.

1. Z Komisji "Energia Jadrowa" Polskiego Komitetu Normalizacyjnego Przewodniczacy: doc. J. Domanus.

(RADIUM)

DOMANUS, Jozef; OSUCHOWSKI, Boguslaw

The concept of "gram-equivlaent-of-radium" for non-point isotopic gramma-ray sources. Nukleonika 5 no.3:143-148 '60.

1. Nuclear Energy Commission, Polish Standards Commitee, Warszawa.

DOMAŃUS, Jozef; OSUCHOWSKI, Boguslaw

Application of large cobalt-60 sources to gamma-radiography of metals. Nukleonika 5 no.5:281-300 '60.

1. Electrotechnical Institute, Warszawa, Industrial Radiology Department.

P/014/60/039//11/006/009
A221/A026

AUTHORS: Domanus, Józef; Kamiński, Benedykt

TITLE: Application of Isotope Liquid Level Indicator in the Ammonia Synthesis Process

PERIODICAL: Przemysł Chemiczny, 1960, Vol 39, No. 11, pp. 688 - 690

TEXT: In this article the authors explain the working principles of an isotope device for controlling liquid levels inside closed containers, in this particular case, liquefied ammonia in a heat exchanger. The Zakład Radiologii Przemysłowej, Instytutu Elektrotechniki (Electroengineering Institute, Industrial Radiology Department) in Warsaw designed a prototype of liquid level isotope indicator "IM?-1" in 1958. This prototype was installed in the Ammonia Synthesis Plant at the Zakłady Azotowe (Nitrogen Products Plant) in Kędzierzyn, where it is in satisfactory operation ever since. Application of isotopes for liquid-level control is based on the phenomenon that a layer of liquid weakens the radiation energy of a ionizing radiation beam emanating from the radioactive isotope. The degree of weakening depends on the energy of the radiation source and on the type and density of the material through which the beam of radiation has to pass. A layer of liquid, thick enough to be able to reduce the original radiation energy by half, is

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Application of Isotope Liquid Level Indicator in the Ammonia Synthesis Process

called "half absorbing thickness". In case of gamma radiation of cobalt 60, the "half absorbing thickness" for iron equals approximately 18 mm and for water 125mm. Principles of radiological level measuring are the same as in radio isotope level control, already described in Przemysł Chemiczny 37,637 (1958) by the above-mentioned authors (Ref. 1). Particulars of liquefied ammonia level indicator are shown in Figure 2. The indicator consists of cobalt-60 source and the Geiger-Müller counter. The range of measurement, i.e. maximum and minimum level of liquid is limited, depending on the container's diameter and type and density of measured fluid. In March 1958, a prototype of the similar indicator IMP-2 was installed in the ammonia synthesis plant in Kędzierzyn on a heat exchanger of following dimensions: diameter of vessel -500 mm, height -7,000 mm, wall thickness - 90 mm, measured medium - liquefied ammonia, pressure - 300 atm, inside temperature -10°C. Since that date there are 9 such indicators in operation in Kędzierzyn. Their level measuring range is 0.5 m with a ± 5 cm accuracy. The level is recorded on a dial indicator fitted on the instrument panel in the control room. This type of level indicator can successfully be used whenever plant conditions forbid fitting of the conventional measuring instruments inside the containers. More in-

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Instruments of this type are being manufactured by the Institute of Electroengineering. In the near future they will be produced serially. There are 2 photos, 1 figure and 1 Polish reference.

ASSOCIATION: Zakład Radiologii Przemysłowej Instytutu Elektrotechniki (Institute of Electroengineering; Industrial Radiology Section)

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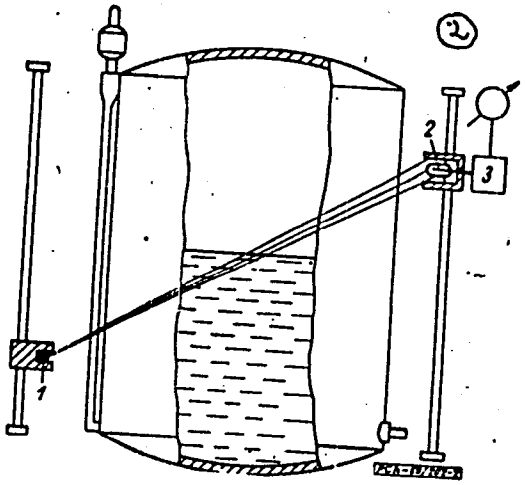
Figure 2: Principle of liquefied ammonia level measurement
1 - radioactive isotope, 2 - the pick-up (G-M counter), 3 - isotope level meter with a dial indicator



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