ADRASHNIKOV, S.N.; CHETVERIKOV, N.S.

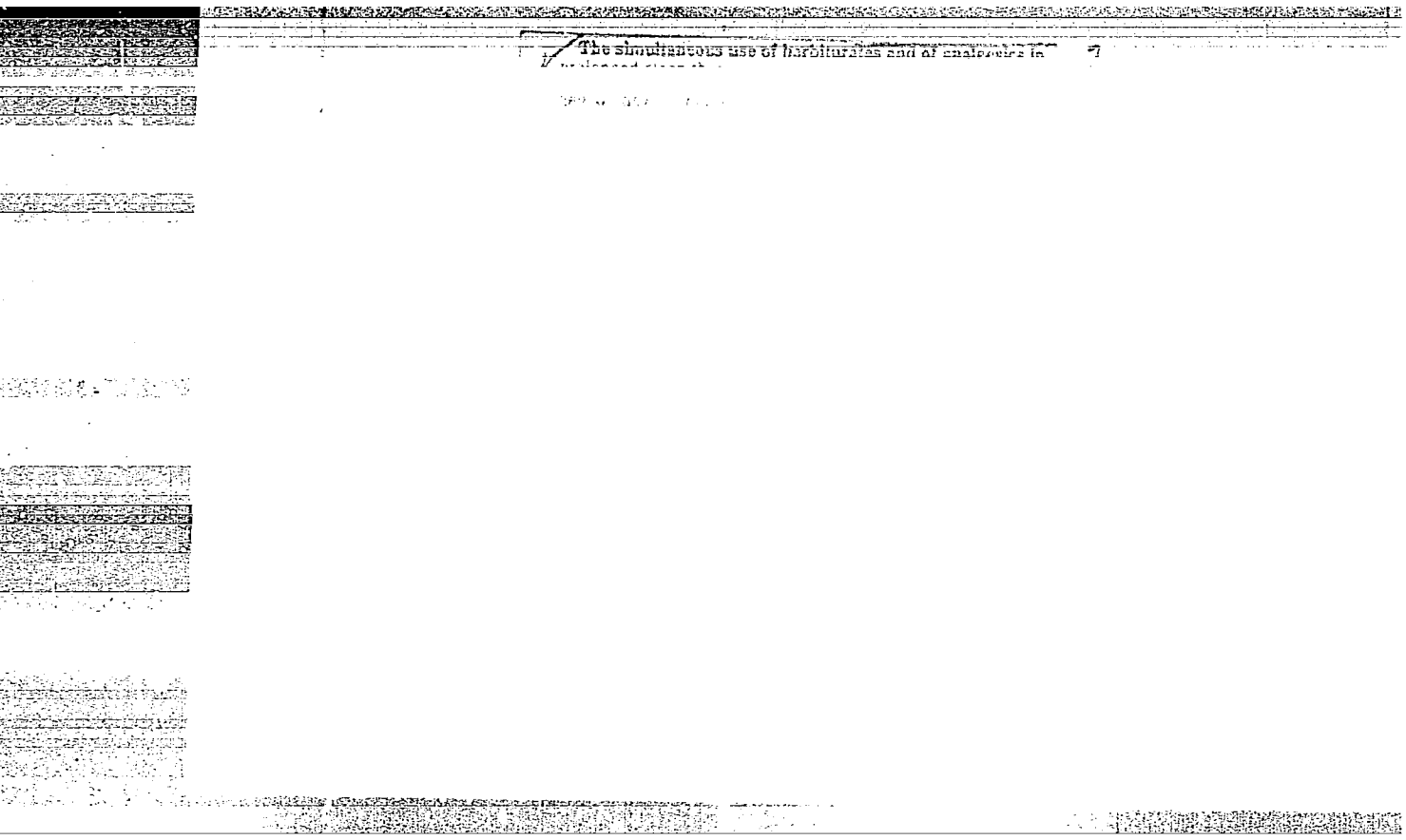
Apropos of the article of D.K. Zavadovskii, "Some problems in dosimetry of betatron radiation," printed in "Meditsinskaia radiologiia" No.5, 1961. Med.rad. 7 no.7:77-78 Jl '62.
(MIRA 15:11)

(RADIATION--DOSAGE) (ZAVADOVSKII, D.K.)

ADREYEV, A.L.

Treatment of epilepsy according to Karmanova's method. Zh. nevropat. psikhiat., Moskva 52 no.1:34-38 Jan 52. (CLML 21:5)

1. Candidate Medical Sciences. 2. Of Moscow Psychiatric Hospital imeni Kashchenko.



APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000100330004-0"

R/009/60/000/009/006/008
A125/A026

AUTHOR: Adrian, Alex, Engineer

TITLE: The Optimum Correction of Tooth Systems

PERIODICAL: Metalurgia şi Construcţia de Maşini, 1960, No. 9, pp. 814 - 821

TEXT: The article presents a method of optimum correction of gears. It has the advantages of a "selection" of the multiple problems regarding the correction to be applied to a gear. The selection becomes logical and regular, similar to the calculation of the tolerances of gears, according to the new Soviet standards. The practical results seem to be good, according to some, certainly incomplete data. The correction of the teeth by displacement of the reference rack is accomplished: for the avoidance of interference; that the elements of the drive should be an integral or a normalized number; to increase the service life of the drive; optimum use of the material; as quiet an operation as possible. The correction can be accomplished with symmetrical values for the correction of interfering gears; and with different values. The gears are designated: tooth system X (non-corrected tooth system); tooth system Y (symmetrically corrected); tooth system Z (non-symmetrically corrected); tooth system J (corrected to avoid interfer-

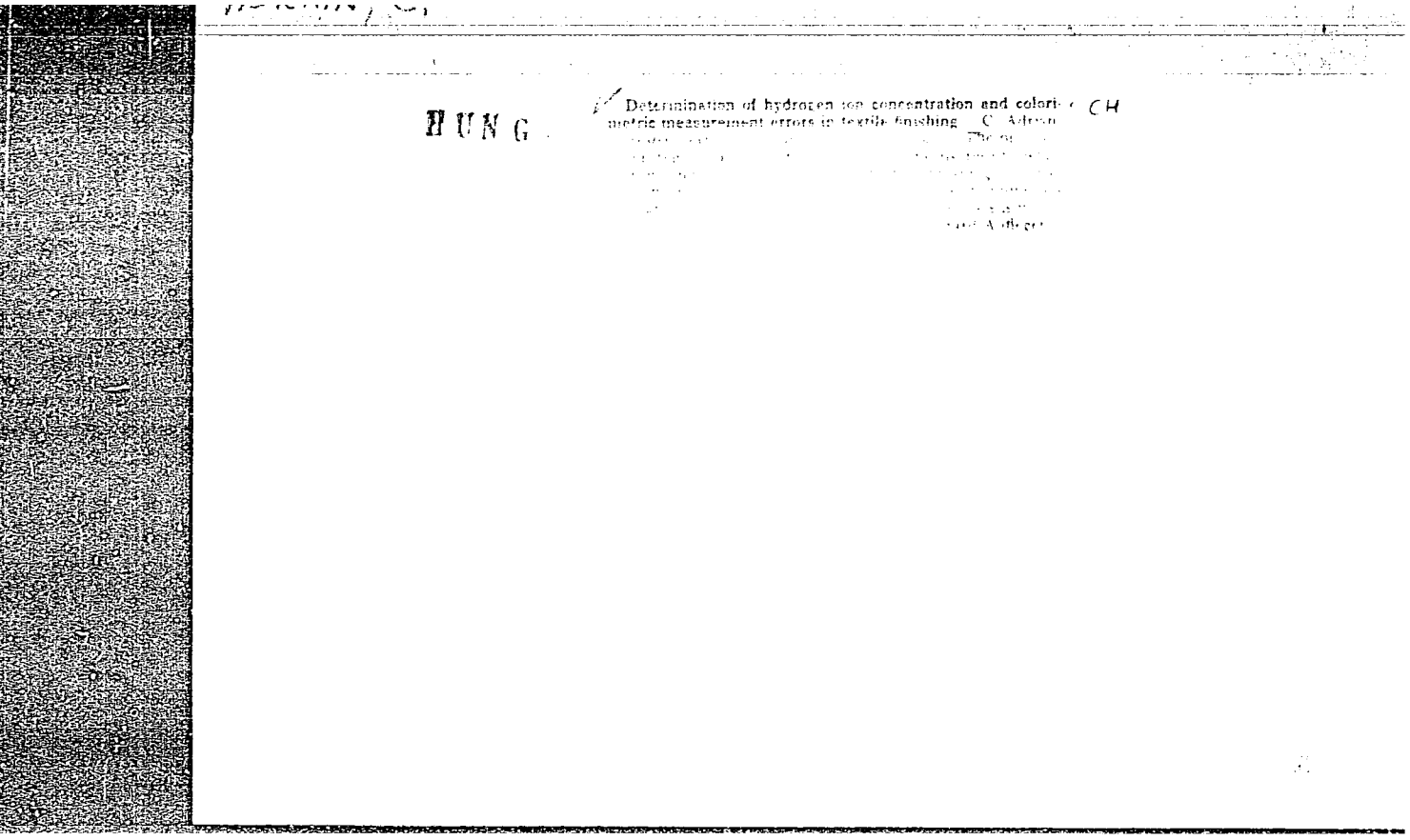
Card 1/3

manufacturer of the respective machine tool. The correction of the tooth systems in worm gears is not necessary. The teeth of the worm are made of steel and are broad at the base, while the teeth of the cog wheel are solidified. A correction is only used to avoid interference. Reference is made to 8 calculation examples. The selection of the optimum correction of gears is considerably simplified by using the described methods, but it is possible that the best method has not yet been found. There can be also errors in the hypothesis of the basic theories, which then modify the recommended results. The correction coefficients must be considered a step forward. There are 14 figures and 8 references: 2 Rumanian, 2 Soviet and 4 German.

[illegible]RIAN, C.

"Degradation of Cellulose during the Finishing of Cotton Textiles and Ways of Avoiding It", p. [illegible], (INDUSTRIA TEXTILA, Vol. [illegible], No. 1[illegible], October 1[illegible], Bucharest, Rumania)

SO: Monthly List of East European Accessions (EEAL), LC, Vol. 4, No. [illegible], March 1955, Uncl.



HUNG

Determination of hydrogen ion concentration and colori- CH
metric measurement errors in textile finishing C. Adrian

ADRIAN, C.

ADRIAN, C. Finishing of textiles made from cellulose fiber. p. 341.

Vol. 6, no. 10, Oct. 1955
INDUSTRIA TEXTILA
Bucuresti, Rumania

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

ADRIAN, C.

RUMANIA/Chemical Technology - Chemical Products and Their Application, Part 4. - Dyeing and Chemical Treatment of Textile Materials. H-33

Abs Jour : Ref Zhur - Khimiya, No 7, 1958, 23559

Author : C. Adrian
Inst :
Title : Utilization of Sodium Chlorite in Textile Industry.

Orig Pub : Ind. textila, 1956, 7, No 8, 364-367

Abstract : The advantages of sodium chlorite (I) use for fabric bleaching (stability of the bleaching effect, possibility of bleaching in an acid medium, the bleached fabric is not ruined), the methods of I production and its physical-chemical properties are discussed. Four atoms of active chlorine correspond to 1 mole of I. The oxidation potential of I in a solution containing 1 g of active chlorine per lit is below the potential necessary for breaking the micromolecular chain of cellulose. Equipment of

Card 1/2

ADRIAN, C.

Country : RUMANIA
Catogory : Chemical Technology. Chemical Products (Part 4). Dyeing and Chemical Treatment of Textile Materials
Abs. Jour. : Ref Zhur-Khim, 1959, No 7, 25876

Author : Goldstein, P.; Viana, M.; Dickmann, J.;*
Institut. : -
Title : Special Finishes for Fabrics from Cellulose Fibers and Viscose

Orig Pub. : Hl-a Consf. tehn.-stiint. a ind. usoare. Textile, (Bucuresti), ASIT, 1957, 307-313

Abstract : To give wrinkle resistance to the fabrics from cellulose fibers, products were used of the initial condensation of synthetic resins on the basis of CH_2O and melamine (Kasgurite MKF), dicyanamide (Kaurite DD), urea (Kaurite KF, Ureol AK, Demoremol M), and also product U.F., obtained by means of the action of CH_2O on urea with a molecular ratio of 2:1, in an alkaline medium (pH

* Adrian, C.; Solomon, I.

Card: 1/3

Country : [illegible]
Category :

Abs. Jour : [illegible]

Author : Solomon, I.; Adrian, C.; Kendel, T.; Tursu, Gh.
Institut. :
Title : Diminishing of Shrinkage in Semi-Woolen and Cotton Fabrics

Orig Pub. : Il-a Conf. Nat.-Stiint. a Ind. Uoare. Textile. (Bucuresti), ICIT, 1967, 314-319

Abstract : Tests are given on diminishing shrinkage in semi-woolen fabrics with a high content of cellulose fibers by impregnating the fabrics with different semicondensates (Mirulan KW, DTSH, Velan PF, Kasurit HP, UF_2, Preska PAG, polyvinylacetate, Primonit BO), with subsequent drying at 60-70° and condensation for 5-8 minutes at 105-150° in the presence of a catalyst (NH_4HO_3, NH_4Cl). Best results were

Card: 1/3

Country : RUMANIA H
Category :

Abs. Jour : 44497

Author :
Institut. :
Title :

Orig Pub. :

Abstract : For lowering shrinkage of cotton fabrics the following is recommended: increasing the norm of width of the unbleached in relation to the finished fabric, and elimination of severe stretching in the finishing process. G. Markus

Card: 3/3

RUMANIA / Chemical Technology, Chemical Products and H
Their Application, Part 4. - Dyeing and Chemical Treatment of Textile Materials.

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 63199.

Abstract: application of special corrosion resisting materials and the expensiveness of $NaClO_2$. See part I in RZhKhim, 1958, 23559.

Card 2/2 55

ACC NR: AP6028502 (N) SOURCE CODE: PO/0094/66/000/027/0007/0007

AUTHOR: Adrian, Janusz

ORG: none

TITLE: Presenting the GSP

SOURCE: Zolnierz Polski, no. 27, 1966, 7

TOPIC TAGS: amphibious vehicle, tracked vehicle

ABSTRACT: Combat engineers of the Polish Army use a vehicle called GSP, a caterpillar self-propelled amphibious ferryboat. It is mounted on self-propelled floating undercarriages of caterpillar transports and serves for rapid ferrying of heavy military equipment, even T-55 tanks. Similar vehicles produced in France (the "Gillois"), the German Federal Republic ("Aligator") and the United States (the MFAB-F) do not have this carrying capacity (the maximum load on a ferry made up of two "Gillois" vehicles is 30 tons) and can travel only on relatively smooth and hard terrain. The versatility and carrying capacity of the GSP make it a very useful and superior land and water transport. Orig. art. has: 2 figures.

SUB CODE: 13/ SUBM DATE: none

Card 1/1

ADRIAN, M., Engineer

"Sticking Together of Thin Plates in Hot Rolling." Sub 22 Nov 51, Moscow Order the Labor Red Banner Inst of Steel imeni I. V. Stalin.

Dissertations presented for science and engineering degrees in Moscow during 19

SO: Sum. No. 480, 9 May 55.

L 33352-66 EWP(t)/EWP(k)/ETI IJP(c) JD/HW

ACC NR: AP6024595 SOURCE CODE: RU/0017/65/000/009/0461/0465

AUTHOR: Adrian, M. (Engineer); Dragan, I. (Engineer); Gazimirovici, E. (Engineer)

ORG: "Gheorghe Gheorghiu-Dej" Polytechnical Institute, Bucharest (Institutul Politehnic "Gheorghe Gheorghiu-Dej")

TITLE: Studies on the establishment of the optimum reduction conditions in the cold rolling of substitution non-corrosive steels

SOURCE: Metalurgia, no. 9, 1965, 461-465

TOPIC TAGS: cold rolling, corrosion resistant steel, hot rolling, material deformat

ABSTRACT: A report on tests carried out with hot-rolled 3-millimeter steel strips. The authors found that deformations in the cold state can be achieved under good conditions up to the point where h = 8.8 millimeters (Δh = 60 to 70 percent); above this point, a thermal treatment is required. Orig. art. has: 11 figures and 8 tables. [Based on authors' Eng. abst.] [JPRS: 33,732]

SUB CODE: 13, 11 / SUBM DATE: none / ORIG REF: 001 / SOV REF: 004
OTH REF: 001

Card 1/1 BLG UDC: 621.771.2:669.14.018.8

0915 2228

83519
R/003/60/011/005/008/023
A125/A026

21.7200

AUTHORS: Adrian, P., Engineer; Arizan, D., Pharmaceutist; Constantinide, A., Engineer

TITLE: Synthesis of Medicines With Traced Atoms

PERIODICAL: Revista de Chimie, 1960, Vol. 11, No. 5, pp. 276 - 282

TEXT: Subject article deals with medicines, which contain one or more traced elements in their molecules. The authors mention the tracing process and the isotopes generally used and describe several examples of traced medicine synthesis, such as: a) synthesis of the traced glutamic acid; b) synthesis of the traced D_3 vitamin; c) cholestenon 4-^{14}C-enol-acetate (VII); d) cholesterin 4-^{14}C (VIII-a); e) epicholesterin 4-^{14}C (IX-a); f) cholesteryl 4-^{14}C-benzoate (VIII-b); g) 7-dehydrocholesteryl-4-^{14}C-(3', 5'-dinitrobenzoate) (XII-c); h) vitamin D_3-4-^{14}C-(3', 5'-dinitrobenzoate) (XIII-c); and i) vitamin D_3-4-^{14}C-butyrate (XIII-d). With regard to the radioactive biosynthesis, M.M. Leviton, V. A. Gotovtseva and others developed a medium of synthetic culture with a low content of sulfur in 1956. I.W. Halliday and H.R. Arnstein studied the biosynthesis capacity of the mycelium of "Penicillium chrysogenum" also in 1956. In the re-

Card 1/3

ADRIAN, P.

R/003/60/011/005/018/023
A125/A026

AUTHOR: None given

TITLE: Meeting of the Chemical Industry

PERIODICAL: Revista de Chimie, 1960, Vol. 11, No. 5, pp. 299 - 302

TEXT: In the meeting on "Radioisotopes in Research and Chemical Industry", held on March 7 - 8, 1960, organized by Secția Chimie - Comisia de Radiochimie (Chemical Section - Radiochemical Commission) led by Dr. G. Ioanid and opened by lecturer I. Drîmuș, President of the Chemical Section, and by Professor, Academician S. Tițeica, the following papers were read: "Production of Radioactive Isotopes in Rumania" by C. Chiotan; "Production of Radioactive Iron from Complex Combinations by Szillard-Chalmers Reactions" by C. Chiotan and A. [illegible]; "Gammagraphical Sources Produced at the Institute of Nuclear Physics" by [illegible] [illegible]lea, P. Florican and M. Onceanu; "Principles for Planning and Organization of the Radiochemical Laboratories" by Al. Pusili; "Protection of the Organism Against the Noxious Action of Ionizing Radiations with the Aid of Some Chemical Compounds" by Gh. Puznici; "Decontamination Within the Laboratories Operating With Radioactive Isotopes" by I. Gastar and D. Serban; "Application of Radioac-

Card 1/2

tive Isotopes in Chemical Industry" by G. Ioanid; "Achievements at the I.F.A. in the Field of the Radiation Chemistry" by D. [illegible]; "Ionizing Radiation, Initiator of the Oxidation Reaction of Paraffin" by G. Ioanid, [illegible], I. Drîmuș, A. Stoian and V. [illegible]; "Polymerization and Grafting [illegible] Under the Influence of Ionizing Radiations" by [illegible], [illegible] and [illegible]; "Sterilization of Medicines with Gamma Radiation" by [illegible], [illegible]; "Synthesis of Medicines by Traced Atoms" by [illegible] Adrian and A. Constantinide; "Application of Radioactive Isotopes in Chemical Research" by P. Adrian and A. Constantinide; "Achievements in Radiochemistry at the Chemical Institute of the Rumanian Academy, Cluj Affiliation and at the Department of Analytic Chemistry of the Babeș-Bolyai University" by [illegible], Gh. [illegible] and [illegible]; "Tempering Processes in the Szillard-Chalmers Effect" by [illegible]; "Reactions of Isotopic Exchanges in Heterogeneous Medium" by I. Gălățeanu; "Contributions to the Study of the Ionic Exchange on Cationic Resins. Utilization of Organic Solvents as Eluant Agents in the Cationic Exchange" by G. Constantinescu; "Works of the Researchers at the I.F.A. With Regard to the Utilization of Radioactive Isotopes in Analytic Chemistry" by [illegible]; "Radiochemical Determinations in Ferrous Metallurgy" by Gh. Dumitrescu; and "Radiometric Measurings in Chemical Industry" by Gh. Ioanid.

Card 2/2

ADRIAN, Valeriu
SURNAME, Given Names

(42)

Country: Rumania

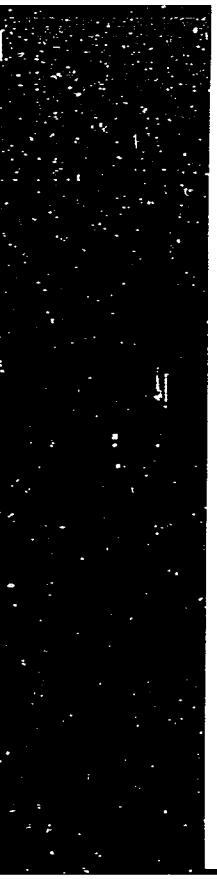
Academic Degrees: -not given-

Affiliation: Institute of Atomic Physics (Institutul de Fizica Atomica).

Source: Bucharest, Stiinta si Tehnica, Vol XIII, No 12, Dec 1961, pp 10-19.

Data: "Magnetic Resonance."

GPO 981643



BALMUS, P., prof.; CARASIEVICI, V., dr.; POPOVICI, N., dr.; NUBERT, Gr., dr.; ADRIAN, V., dr.; RUGINA, V., dr.; BRAIER, R., dr.

Study of pulmonary ventilation disorders in spondylitis ankylopoietica. Modifying action of balneophysiotherapy. Med. intern., Bucur 12 no.12:1867-1872 D '60.

(SPONDYLITIS, ANKYLOSING therapy)
(BALNEOLOGY) (RESPIRATION) (EXERCISE THERAPY)

BALMUS, P., conf.; CARASIEVICI, V., dr.; MAGERU, V., dr.; BRAIER, R., dr.;
ADRIAN, V., dr.; NUBERT, G., dr.; RUGINA, V., dr.;
POPOVICI, N., dr.; POLAC, S., dr.

The action of vasculosympathetic faradization on algodystrophies of the upper extremities. Med. intern. 15 no.7:809-815 Jl '63.

1. Lucrare efectuata in Clinica de balneologie a I.M.F., Iasi.

(SHOULDER-HAND SYNDROME) (RHEUMATISM)
(ELECTROTHERAPY)

[illegible], V.

Bulletin of quality.

P. P.([illegible]) (Bucuresti, Rumania) Vol. 5, No. 4[illegible], Sept. 1958

SO: Monthly Index of East European Accessions (EEAI) LC Vol. 7, No. 5, 1958

ADRIANKIN, E.I. (Moskva).

Intense explosions in media with density gradients. Izv. AN SSSR. Otd. tekh. nauk no.2:123-125 F '58. (MIRA 11:3)
(Explosions) (Fluid dynamics)

ADRIANOV, A., inzh.

New cooling system unit for SMD-7 engines. Tekh.v sel'knoz. 20 no.7:83 Jl '60. (MIRA 13:9)

1. Sibirskaya mashinoispytatel'naya stantsiya.
(Combines (Agricultural machinery))
(Engines—Cooling)

ADRIANOV, A. F.

ADRIANOV, A. F. CA: 37-3537/9
Priroda No. 9, 45-53 (1940); Chem. Zentr. 1942I, 444
The spectrum analysis of motor fuels.

ADRIANOV, A.F.

Analysis of multicomponent mixtures with a differential absorption meter (colorimeter). V. M. Chulanovskii, A. F. Adrianov, and B. I. Rubinovich (Leningrad State Univ.). *Zhur. Anal. Khim.* 4, 345-53(1949).—This method is based not on eliminating the part of a light beam absorbed by more than one component but on taking into account the differential absorption by various components. The general equation for this method, derived from the Lambert-Beer equation, is $I = d\Sigma c_i K_i$, where I is the light traversing the medium, d is the thickness of the absorbing medium, Σc_i is the summation of concn. of absorbing substances, and $K_i = \int I_\nu k_{\nu\alpha}$ is the integral absorption coeff. K_i depends on the intensity of incident light and on the spectral compn. of this light. By using a number of filters a set of equations is obtained enabling the analysis of a multicomponent mixt.

M. Hosch

Andrianov, A.S.

USSR/Physical Chemistry. Crystals. B-5

Abs Jour: Ref Zhur-Khimiya, No 5, 1957, 14559 D

Author : A. S. Andrianov
Inst : Saratov University
Title : The Study of Absorption and Radiation Spectra of Alkaline-Haloid Phosphors, Activated by Tin

Orig Pub: Avtoref. diss. kand. fiz.-matem. n., saratovsk. un-t, Saratov, 1956

Abstract: No abstract

Card 1/1

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[illegible] .2
[illegible] 2

[illegible] TRANSPL[illegible] [illegible] (SYSH[illegible]

([illegible] CAPACITY OF I DUSTRIAL [illegible] G IT)

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36, (3) [illegible]. (VS[illegible]S[illegible] Y[illegible]Z[illegible] [illegible] S[illegible]SKIKH

I [illegible] CH[illegible] ZH[illegible], S[illegible]. [illegible], VYP. I, [illegible]. 14)

"LITE[illegible]ATURA": P. (3[illegible])

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ADRIANOV, G.F., inzh.

New fittings for carding-machine flats. Tekst.prom. 17 no.12: 49-51 D '57. (MIRA 11:1)
(Carding machines)

ADRIANOV, G.E.; SHATILOVICH, S.A., starshiy nauchnyy sotrudnik; GRIGOR'YEV, V.I., starshiy nauchnyy sotrudnik.

New method for turning the elastic top rolls of spinning machinery drafters. Tekst. prom. 24 no.5:23-25 My '64 (MIRA 18:2)

1. Nachal'nik pryadil'noy laboratorii Yaroslavskogo proyektno-tekhnologicheskogo i nauchno-issledovatel'skogo instituta Verkhne-Volzhskogo soveta narodnogo khozyaystva (for Adrianov). 2. Yaroslavskiy proyektno-tekhnologicheskiy i nauchno-issledo - vatel'skiy institut Verkhne-Volzhskogo soveta narodnogo khoz- yaystva (for Shatilovich, Grigor'yev).

ADRIANOV, G.F.

More about the efficiency of the work of carding machines with an arrangement of the caps tangentially to the cylinder. Izv. vys. ucheb. zav.; tekh. tekst. prom. no.6:34-39 '64.
(MIRA 18:3)

1. Vsesoyuznyy zaochnyy institut tekstil'noy i legkoy promyshlennosti.

ADRIANOV, G.F.

Detection of defect spindles on spinning machines. Izv.vys.ucheb. zav.; tekh.tekst.prom. no.3:57-61 '65. (MIRA 18:8)

1. Vsesoyuznyy zaochnyy institut tekstil'noy i legkoy promyshlennosti.

ADRIANOV, I.I., kandidat tekhnicheskikh nauk.

Using the generalized vector method to analyze alternating current power installations on ships. Sudostoenie 22:13-18 S '56.
(Electricity on ships) (Vector analysis) (MLRA 10:1)

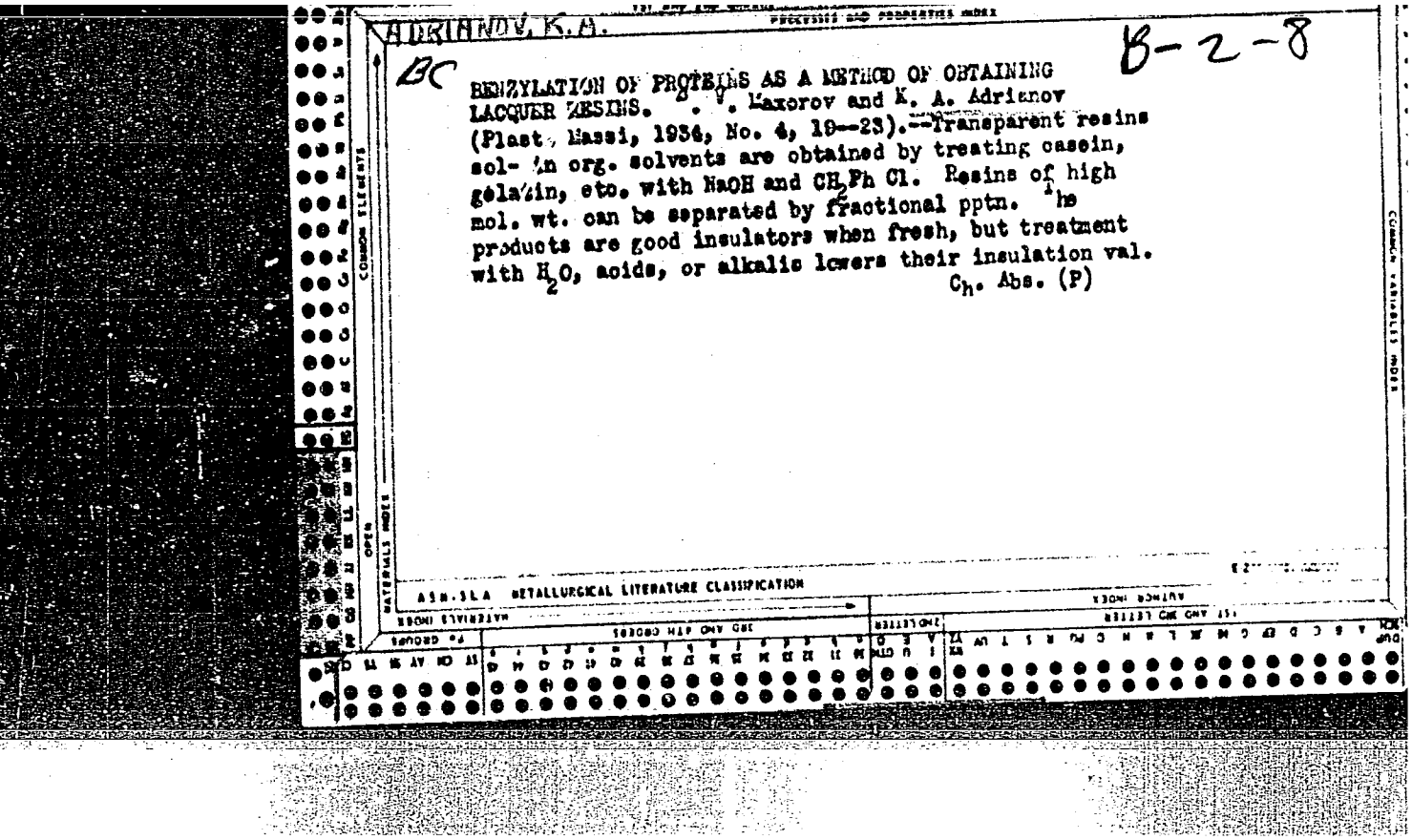
ADRIANOV, I. V.

7479. ADRIANOV, I. V. Privedeniye izmerennykh uglov k tsentram punkton triangulyatsii. M., 1954. 60s. s chert. 27sm. (m-vo ugol'noy prom-sti SSSR. Tekhn. upr. tsentr. in-t tekh. informatsii). 2,000 EKZ. bespl. v per.-- (55-3179)p 526.3

So. Knizhnaya Letopis', Vol. 7, 1955

ADRIANOV, Igor' Vladimirovich; KOS'KOV, B.I., red.

[Tachymetric tables] Takheometricheskie tablitsy. Moskva, Izd-vo M-va kommun.khoz.RSFSR, 1963. 247 p.
(MIRA 17:6)



ADRIANOV, K. A.

B-2-8

BC

BENZYLATION OF PROTEINS AS A METHOD OF OBTAINING LACQUER RESINS. . . Maxorov and K. A. Adrianov (Plast. Massi, 1936, No. 4, 19—23).—Transparent resins sol- in org. solvents are obtained by treating casein, gelatin, etc. with NaOH and CH_2PhCl. Resins of high mol. wt. can be separated by fractional pptn. The products are good insulators when fresh, but treatment with H_2O, acids, or alkalis lowers their insulation val.

Ch. Abs. (P)

SUBJECT USSR / PHYSICS CARD 1 / 2 PA - 1267
AUTHOR ADRIANOW, K.A., GOLUBKOW, G.E.
TITLE The Electric Properties and the Structure of Organosilicon Polymers
PERIODICAL Zurn. techn. fis, 26, fasc. 8, 1689-1695 (1956)
Publ. 8 / 1956 reviewed 9 / 1956

Organosilicon polymers, the polyorganosiloxans, have a number of valuable properties that are of a certain technical interest. They have polymeric molecules, th chains of which are composed of silicon and oxygen atoms, while the other valenc of silicon are replaced by organic radicals. The present work attempts to determ the polar properties of siloxan compounds in polyorganosiloxans by studying the electric properties of polymers of different compositions. For the determination of these polar properties it is necessary to investigate ε and tgδ within the range of low values of temperature. In the present instance two types were inves igated: polydimethylesiloxan and polydiethylesiloxan. At the same time also the changes of thermal properties during heating and cooling of the polymers were examined. Electric properties were examined at different temperatures and frequences. Investigations were carried out with polydimethylsiloxan produced by catalytic and by thermal condensation and vulcanized with benzoilehyperoxide. These were applied on to a rod which served as an electrode, and on to this a fo electrode firmly enclosing the polymer layer was applied. This arrangement made it possible to observe changes of the dielectric constant. The angle of dielectri losses and the capacity of the samples were determined, and herefrom the dielect constant was computed. Within the range of low temperatures, near vitrification,

ADRIANOV, K.A.; ZHDANOV, A.A.

Interaction of metals with silicon organic compounds containing hydroxyl group. AN SSSR. Otd. khim. nauk no.9:1076-1079 S '58. (MIRA 11:10)

1.Institut elementoorganicheskikh soyedineniy AN SSSR.
(Silicon organic compounds) (Metals)

ADRIANOV, L.I.

Pressure Joining of Aluminum Bus Bars, Engrs. L.I.Adrianov, G.F. Orlovskiy Elek.Sta.no. 2, pp 26-29, 1953

Describes pressure welding method for joining aluminum bus bar sections, develo since 1950 by Planning-Exptl Bureau, "Sevzapelektromontazh" Trust. Bus bar end are lapped, clamped between special forms at high pressure, and fused together points of highest ~~xxxxxxxxx~~ pressure. Use of various manual and hydraulic pr ses is mentioned.

25[illegible]

128

PHASE I BOOK EXPLOITATION SOV/6246

Soveshchaniye po tseolitam. 1st, Leningrad, 1961.

Sinteticheskiye tseolity; polucheniye, issledovaniye i primeneniye (Synthetic Zeolites: Production, Investigation, and Use). Moscow, Izd-vo AN SSSR, 1962. 286 p. (Series: Its: Doklady) Errata slip inserted. 2500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh nauk. Komisiya po tseolitam.

Resp. Eds.: M. M. Dubinin, Academician and V. V. Serpinskiy, Doctor of Chemical-Sciences; Ed.: Ye. G. Zhukovskaya; Tech. Ed.: S. P. Golub'.

PURPOSE: This book is intended for scientists and engineers engaged in the production of synthetic zeolites (molecular sieves), and for chemists in general.

Card 1/3

Synthetic Zeolites: (Cont.) SOV/6246

COVERAGE: The book is a collection of reports presented at the First Conference on Zeolites, held in Leningrad 16 through 19 March 1961 at the Leningrad Technological Institute imeni Lensovet, and is purportedly the first monograph on this subject. The reports are grouped into 3 subject areas: 1) theoretical problems of adsorption on various types of zeolites and methods for their investigation, 2) the production of zeolites, and 3) application of zeolites. No personalities are mentioned. References follow individual articles.

TABLE OF CONTENTS:

7

Synthetic Ze[illegible] SOV/6246

[illegible]BLEMS OF ADSORPTION ON ZEOLITES. METHODS OF INVESTIGATION

Card 3/[illegible]

BARON, L.I.; ADRIANOV, N.F.

Investigating rock shattering by explosives at two northern Kazakhstan ore deposits. Izv.AN Kazakh.SSR. Ser.gor.dela no.2:67-71 '59. (MIRA 13:4)
(Kazakhstan--Rocks) (Mining engineering)

BARON, L.I., prof., doktor tekhn.nauk; DEMIDYUK, G.P., kand.tekhn.nauk; ADRIANOV, N.F., gornyy inzh.

Foreign experience in the improvement of blasting operations based on the use of explosives of the simplest composition. Vzryv. delo no.45:177-195 '60. (MIRA 14:1)
(Blasting)

BARON, L.I., prof., doktor tekhn.nauk; ADRIANOV, N.F., gornyy inzhener

Study of some regularities of secondary blasting in open pits. Vzryv. delo no.50/7:162-175 '62. (MIRA 15:9)

1. Institut gornogo dela imeni A.A. Skochinskogo.
(Blasting)
(Rocks—Testing)

BARON, L.I., prof., doktor tekhn. nauk; ADRIANOV, N.F., gornyy inzh.

Study of the efficiency of crushing rocks in using "igdanit" for blasting in pits. Vzryv. delo no.53/10:194-202 '63. (MIRA 16:8)

1. Institut gornogo dela im A.A. Skochinskogo.
(Explosives—Testing)

DEMIDYUK, G.P., kand.tekhn.nauk; ADRIANOV, N.F., gornyy inzh. ener

The crushing of rocks and the extent of utilizing the explosive energy. Nauch. soob. IGD 21:54-59 '63. (MIRA 17:2)

MESHCHERSKIY, Rostislav Mikhaylovich; ADRIANOV, O.A., red.; SENCHILO, K.K., tekhn. red.

[Stereotaxic method; experimental and clinical use] Stereotaksicheskii metod; primenenie v eksperimente i klinike. Moskva, Medgiz, 1961. 202 p. (MIRA 14:12)

(ELECTROPHYSIOLOGY)

ADRIANOV, O.; MIKELADZE, A.

Fifth Gagra Conference. Zhur. vys. nerv. deiat. 15 no.6:1133-1137 N-D '65. (MIRA 19:1)

"Morphophysiological Differentiation of the Nucleus of the Motor Analyzer of a Dog and Its Part in the Visual Act." Sub 6 Jan 52, Acad Med Sci USSR.

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

ADRIANOV, O. S.

"Morphophysiological Characteristics of the Cortical Nuclear Zone of the Motor Analysor in Dogs," Zhur. vys. nerv. deyat., 2, No.3, 1952

ADRIANOV, O.S.

Participation of the nuclear zone of the motor analysor in visual function of dog. Zh. vysshei nerv. deiat. 3 no.3:428-443 May-June 1953. (CLML 25:4)

1. Institute of the Brain of the Ministry of Public Health USSR.

Changes in tonic reactions in dogs following removal of the cerebral nuclear zone of the motor analysor. Zhur.nevr.i psikh. 53 no.5:328-332 My '53. (MLRA 6:5)

1. Institut mozga Ministerstva zdravookhraniya SSSR. (Nervous system)

... stimulus to an internal inhibition and a deepening of this by the physically weak skin-mechanical stimulus. New indications are brought forward as to the identity of external ...

USSR/Human and Animal Physiology. The Nervous System T-12

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 65658

Author : Adrianov O.S., Mering T.A.
Inst : The Moscow Veterinary Academy
Title : Certain Data on the Question of Localization of Function

Orig Pub : Tr. Mosk. vet. akad., 1957, 20, 15-18

Abstract : On the basis of a morphological and physiological investigation a description is given of the cellular structure of the cerebral neocortical fields of the dog from the position of the theory that the cortex represents the aggregate of the brain termini of the analysers.

Card : 1/1

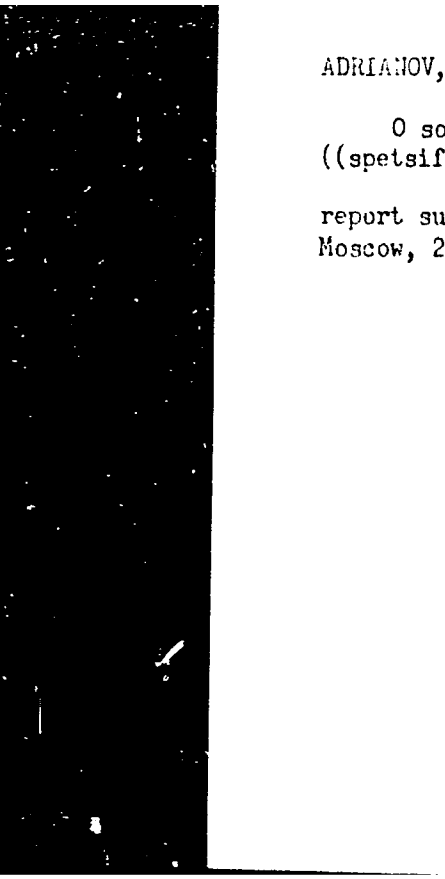
ADRIANOV, Oleg Sergeyevich; MERING, Tat'yana Aleksandrovna. Prinimal uchastiye LEONTOVICH, T.A. BRAZOVSKAYA, F.A., red.; BEL'CHIKOVA, Yu.S., tekhn.red.

[Atlas of the brain and spinal cord of the dog] Atlas mozga sobaki. Moskva, Izd-vo med.lit-ry, 1959. 236 p. (MIRA 13:10)
(DOGS--ANATOMY--ATLASES) (NERVOUS SYSTEM--MAMMALS)

ADRIANOV, O.S.; MORING, T.A.

Morphophysiological characteristics of the cerebral cortex in dogs. Zhur.vys.nerv.deiat. 9 no.3:471-478 My-Je '59. (MIRA 12:9)

1. Laboratory of Conditioned Reflexes, Institute of Brain, U.S.S.R. Academy of Medical Sciences, Moscow.
(CEREBRAL CORTEX - anatomy and histology)



ADRIANOV, O. S. (Moskva)

O sootnoshenii strukury i funktsii G. N. ((nespetsificheskikh)) i ((spetsificheskikh)) yader zritel'nogo bygra

report submitted for the First Moscow Conference on Reticular Formation Moscow, 22-26 March 1960.

ADRIANOV, O.S.

Motor defense reflexes in dogs after disconnection of the cortical ends of the analyzers. Zhur. vys. nerv. deiat. 10 no. 3:377-385 My-Je '60. (MIRA 14:2)

1. Laboratory of Conditioned Reflexes, Institute of the Brain, U.S.S.R. Academy of Medical Sciences, Moscow.
(CONDITIONED RESPONSE)

ADRIANOV, O.S.

Studies on the interrelationship between analyzers in the formation of motor food conditioned reflexes. Zhur.vys.nerv.deiat. 10 no.6: 851-859 N-D '60. (MIRA 14:1)

1. Institut mozga Akademii meditsinskikh nauk SSSR.
(BRAIN) (CONDITIONED RESPONSE)

ADRIANOV, Oleg Sergeyevich, kand. med. nauk; NEKHLYUDOVA, A.S., red.; RYBAKOVA, N.T., red.; RAKITIN, I.T., tekhn. red.

[Brain as the organ of thinking] Mozg - organ myshleniia. Moskva, Izd-vo "Znanie," Vses. ob-va po rasprostraneniiu polit. i nauchn. znanii, 1961. 38 p. (Narodnyi universitet kul'tury. Estestvennonauchnyi fakul'tet, no.5) (MIRA 14:8)
(BRAIN)

ADRIANOV, O.S.

Structure of conditioned reflexes to a simultaneous complex stimulus. Zhur. vys. nerv. deiat. 11 no.6:1019-1025 N-D '61. (MIRA 15:3)

1. Laboratory of Conditioned Reflexes, Institute of the Brain, U.S.S.R. Academy of Medical Sciences, Moscow.

(CONDITIONED RESPONSE)

SARKISOV, S.A., prof., red.; ADRIANOV, O.S., red.; KRYZHANOVSKIY, R.N., red.; FARIN, V.V., red.; POLYAKOV, G.I., red.; POPOVA, Ye.N., red.; PORTUGALOV, V.V., red.; RABINOVICH, M.Ya., red.; TROFIMOV, L.G[deceased], red.; ARKHANGEL'SKIY, Yu.V., red.

[Structure and function of the nervous system; transactions of a scientific conference, December 10 - 14, 1960] Struktura i funktsiia nervnoi sistemy; trudy nauchnoi konferentsii (10-14 dekabria 1960 g.) Moskva, Medgiz, 1962. 358 p. (MIRA 17:12)

1. Deystvitel'nyy chlen AMN SSSR (for Sarkisov).

ADRIANOV, P.

Traffic accidents have been reduced. Avt. transp. 38 no. 12:38-39 D '60. (MIRA 13:12)

1. Vneshtatnyy instruktor Zheleznodorozhnogo raykoma Kommunisticheskoy partii Ukrainy g.L'vova.
(Traffic safety)

ANDRIANOV, P.K.; ANDRIANOV, S.M.; BEREZIKOV, B.S.; GOLOVKO, V.G. [Holovko, V.H.]; DOBROVOL'SKIY, A.V. [Dobrovol's'kyi, A.V.]; DOVGAL', M.F. [Dovhal', M.F.]; YELIZAROV, V.D. [Elizarov, V.D.]; ZHIZDRINSKIY, V.M. [Zhyzdryns'kyi, V.M.]; ZVENIGORODSKIY, O.M. [Zvenigorods'kyi, O.M.]; ZAYCHENKO, R.M. [Zaichenko, R.M.]; IVANENKO, Ye.I. [Ivanenko, Ie.I.]; KOMAR, A.M.; KOS'YANOV, O.M.; KAZAKOV, O.I.; KOSENKO, S.K.; KLIMENKO, T.A.; KIR'YAKOV, O.P.; KALISHUK, O.L.; LELICHENKO, M.T.; LEBEDICH, M.V.; MIKHAYLOV, V.O. [Mykhailov, V.O.]; MOROZ, I.I.; MOSHCHIL', V.Yu. [Moshchil', V.IU.]; NEPOROZHNIY, P.S. [Neporozhnii, P.S.]; NEZDATNIY, S.M. [Nezdatnyi, S.M.]; NOVIKOV, V.I.; POLEVOY, S.K. [Polovoi, S.K.]; PEREKHREST, M.S.; PUZIK, O.Ye. [Puzik, O.E.]; RADIN, K.S.; SLIVINSKIY, O.I. [Slivins'kyi, O.I.]; STANISLAVSKIY, A.I. [Stanislavs'kyi, A.I.]; USPENSKIY, V.P. [Uspens'kyi, V.P.]; KHORKHOT, O.Ya.; KHILYUK, F.P.; TSAPENKO, M.P.; SHVETS, V.I.; MAL'CHEVSKIY, V. [Mal'chevs'kyi, V.], red.; ZELENKOVA, Ye. [Zelenkova, E.], tekhn.red.

[The Ukraine builds] Ukraina buduie. Kyiv, Derzh.vyd-vo lit-ry z budivnytstva i arkhit., 1957. 221 p. (MIRA 11:5)
(Ukraine--Construction industry)

ADRIANOV, S.I. (g. Ustyushna)

Observations on blood-sucking mosquitoes. Med.paraz.i paraz.bol. no.6: 559-560 N-D '53. (MLRA 6:12)

(Mosquitoes)

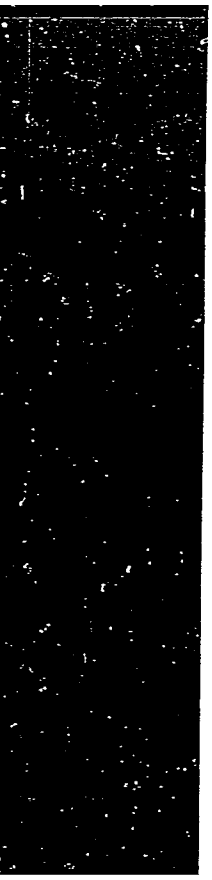
ADRIANOV, S.I. (g. Ustyushna)

Simplified method of preparation of entomologic microscopic specimens. Med. paraz. i paraz. bol. no.2:179 Ap-Je '54.
(INSECTS, (MLRA 7:8)
*prep. of microscopic specimens)

ADRIANOV, S. N.

27834. Adrianov, S. N. Lesomeliorativnyye raboty v zernosovkhoze "Gigant" . Les i step', 1949, No. 1. s. 74-80

SO: Letopis' Zhurnal'nykh Statey, Vol. 37, 1949



ADRIANOV, S. (N.)

"Pre-Planting Growth of Roots on Cuttings of Tree Varieties," Les. Khoz., No.1, 1952

1. ADRIANOV, S. N.

2. USSR (600)

4. Sal'sk Steppe - Oak

7. Oak in the Sal'sk Steppe. Les.i step' 4 no. 12, 1952.

9. Monthly Lists of Russian Accessions, Library of Congress, March 1953, Unclassified.

1. ADRIANOV S. N.

2. USSR (600)

4. Oak

7. Effect of additonal moisture and quantity of shoots per clump on the growth of oak. Les.khoz 5 No. 11. 1952

Translated from the Russian - p. 70, Analele Romano-Sovietice, Seria Silvicultura-Industria Lemnului si a Hartiei, Series a II-a, v. 7, no. 3, May/June 1953, Bucuresti.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassif

ADRIANOV, S. N.

"Protective Forest Cultivation on the Grain Growing Sovkhoz 'Gigant' in Rostovskaya Oblast." Cand Agr Sci, Kherson Agricultural Inst, Kherson, 1953. (RZhBiol, No 5, Nov54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SO: Sum. No.521, 2 Jun 55

Adrianov, S.N.

USSR/Forestry - Forest Plants. K-5

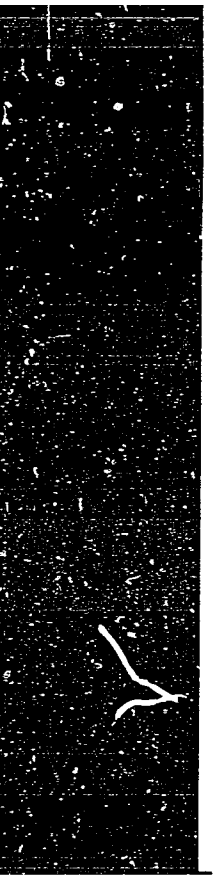
Abs Jour : Ref Zhur - Biol., No 3, 1958, 10622

Author : Adrianov, S.N.
Inst : -
Title : Effective Methods of Growing Field-Protective Forest Belts on the Drought-Stricken and Steppe.

Orig Pub : Lesnoye kh-vo, 1957, No 6, 43-50

Abstract : The creation of field-protecting forest belts of the forest-brushwood type in the droughty and arid steppe of the European part of the USSR does not meet the field-protection demands of the region. Such forest belts become compact and impenetrable to wind. In winter they accumulate snow, taking it away from the fields in between the belts. No forest microclimate can arise in such narrow belts. A description is given of forest and forest-brushwood belts of the type which has 2-2.5 meters between the rows, permitting mechanical cultivation. In the "Gigant" grain

Card 1/2



K.

USSR/Forestry - Forest Cultures.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 15406

Author : S.N. Adrianov

Inst : Kherson Agricultural Institute.

Title : A Qualitative Evaluation of the Oak Biogroups. (Otsenka kachestva biogrupp duba).

Orig Pub : Nauchn. zap. Khersonsk. s.-kh. in-t, 1957, vyp. 6, 153-163.

Abstract : To study the efficiency of raising oak with various biogroups at the test station of the Kherson Scientific Research Institute and under production conditions, several experimental cultures were set up in 1949-1953. Using identical agrotechnics, cluster area, short strip, hole, five hole cluster, and single-tree plantings were utilized. It was established that it is more expedient

Card 1/2

39

USSR/Forestry - Forest Cultures. K.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 15415

Author : S.N. Adrianov

Inst : Kherson Agricultural Institute.

Title : An Advanced Experiment in Steppe Forest Cultivation. (Peredovoy opyt stepnogo lesorazvedeniya).

Orig Pub : Nauchn. Zap. Khersonsk. s.-kh. in-t, 1957, vyp. 6, 311-323.

Abstract : The results of cultivating field protecting forests at the "Gigant" Sovkhoz (Sal'skaya Steppe) are described. The plantings were made on black fallow soil only, plowed to a depth of 25 cm and cleared of weeds. A new method was used, the preplanting loosening of the black fallow soil down to 32-35 cm without turning over the mellowed layer. Planting was also made on virgin soil

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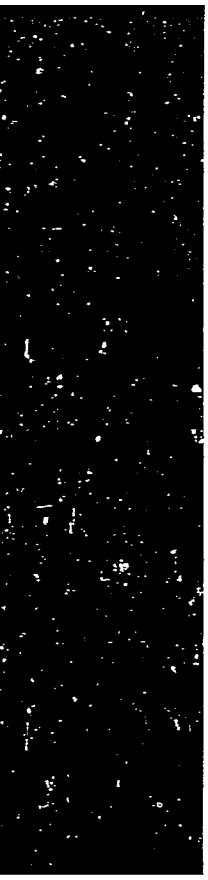


Abs Jour : Ref Zhur - Biol., No 4, 1958, 15415

beds without any couch grass and beds of perennial grasses which excluded the necessity of having the forest culture area lie fallow beforehand. The forest belts were laid with 1-2 year old saplings, seeds, grafts and combined planting and sowing. Deep planting proved very effective while closing up the root collar to a depth of 6-8 cm (as compared with the usual way at 1-2 cm). In order to improve the adaptability of the belts laid with graftings (poplar, willow and golden currants) special methods of preliminary graft implantation (the technique is described) have been worked out in the kolkhoz. Rational methods of preserving acorns have also been worked out and tested, the most successful of which has proved to be in a sand mixture stored in cellars. Excellent results were obtained through the preparation of green ash and Siberian acacia seeds for germination through snow processing

ADRIANOV, S.N., kand.sel'skokhozyaystvennykh nauk

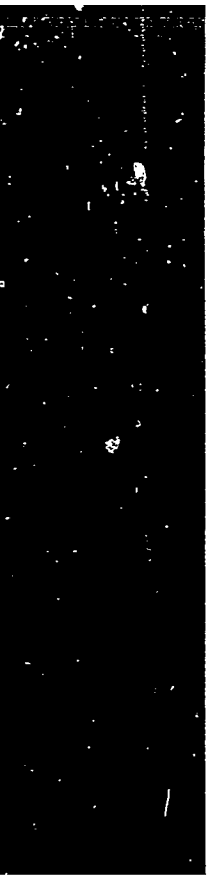
Make-up of shelterbelts in the Altai Territory. Zemledelie 8 no.9:47-52 S '60. (MIRA 13:8)

1. Altayskiy nauchno-issledovatel'skiy institut sel'skogo khozyaystva.
(Altai Territory--Windbreaks, shelterbelts, etc.)

ADRIANOV, S.N.

Effectiveness of manure-soil composts. Zemledelie 26 no.1: 42-43 Ja'64. (MIRA 17:5)

1. Chuvashskaya gosudarstvennaya sel'skokhozyaystvennaya opytnaya stantsiya.



ADRIANOV, S.N., kand. sel'skokhoz. nauk

Shelterbelts in the Kulunda Steppe. Zemledelie 27 no.1: 78-81 Ja '65. (MIRA 18:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut agrolesomelioratsii.

Adrianov, V.N.

124-1957-10-11723 D

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 10, p 74 (USSR)

AUTHOR: Adrianov, V. N.

TITLE: The Heat Exchange of a Flow of Radiationally Emissive Products of Combustion in a Channel (Teploobmen potoka izluchayushchikh produktov sgoraniya v kanale)

ABSTRACT: Bibliographic entry on the Author's dissertation for the degree of Candidate of Technical Sciences, presented to the Energ. in-t AN SSSR (Power Institute, USSR Academy of Sciences), Moscow, 1957.

ASSOCIATION: Energ. in-t AN SSSR (Power Institute, USSR Academy of Sciences), Moscow

Card 1/1

ADRIANOV, V.N., inzhener; SHORIN, S.N., doktor tekhnicheskikh nauk.

Heat transfer by radiating combustion products flowing in a channel. Teploenergetika 4 no.3:50-55 Mr '57. (MLRA 10:3)
(Heat--Transmission)

AUTHOR: Adrianov, V.N., Cand.Tech.Sci. SOV/96-58-7-21/22

TITLE: A scientific-technical session on problems of radiant heat-transfer (Nauchno-tekhnicheskaya sessiya po voprosam luchistogo teploobmena)

PERIODICAL: Teploenergetika, 1958, No.7, pp. 92-94 (USSR)

ABSTRACT: On the 25th - 28th March of this year the High Pressure Steam Commission of the Power Institute of the Academy of Science of the USSR called a scientific-technical session devoted to problems of radiant heat-exchange. The session considered the results of investigations on radiant heat-exchange, defined the future direction of work on this subject, and also began the co-ordination of investigations made by various organisations on radiant heat-exchange. The session was attended by 250 representatives of ministries, academic and other institutes, universities, colleges, design organisations, industrial works and others. In opening the session, Acad. M.A. Mikheyev described the present state of the science of heat-exchange and indicated future lines of development. Dr.Tech.Sci. G.L. Polyak, of the Power Institute of the Academy of Science of the USSR, gave a report entitled 'Radiant Heat-Exchange and its theoretical basis'. Dr.Tech.Sci. S.N. Shorin dealt with 'Light modelling of heat-exchange'. Dr.Tech.Sci. Yu.A. Surinov, of the Power Institute of the Academy of Science of the USSR, spoke on 'The present state of the theory of radiant heat-exchange'. Dr.Tech.Sci. M.A. Glinkov (MIS) treated 'Problems of radiant heat-exchange in open-hearth furnace operation'. Cand.Tech.Sci. A.S. Nevskiy (VNIIMT) reported on

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A scientific-technical session on problems of radiant heat-transfer.

'Methods of calculating radiant heat-exchange in furnaces and the application of the theory of similarity'. Ten reports were presented before the section on furnaces and combustion chambers. That by Cand.Tech.Sci. V.N. Adrianov & Dr.Tech.Sci. S.N. Shorin, Power Institute of the Academy of Science of the USSR, was entitled 'Radiant heat-exchange in a flow of radiating medium'. Cand.Tech.Sci I.P. Kolchenogova, of the Power Institute of the Academy of Science of the USSR, gave the results of an experimental investigation of intensification of heat-exchange in various combustion chambers by using indirect radiators. Cand.Tech.Sci. V.V. Mitor, of the Central Boiler Turbine Institute recounted an experimental investigation of incident and effective radiantfluxes near the screening surfaces of boilers. Dr.Tech.Sci. B.V. Kantorovich (IGI) reported on 'The application of the theory of similarity in the combined investigation of processes of combustion and heat exchange in furnace chambers and industrial furnaces'. G.N. Delyagin (IGI) gave a report entitled 'Investigation of processes of heat exchange and combustion in a cylindrical tube under pressure'. Cand.Phys.Math.Sci. A.L. Lubny-Gertsyk, of the Moscow Division of the Central Boiler Turbine Institute, examined an approximate method of calculating radiation of a non-isothermal absorbing medium. Cand.Tech.Sci. A.G. Blokh & Cand.Tech.Sci. V.V. Mitor, also of the Central Boiler Turbine

A scientific-technical session on problems of radiant heat-transfer.

Institute, spoke on 'Heat-exchange in semi-transparent media'. Cand.Tech.Sci. V.N. Adrianov of the Power Institute of the Academy of Science of the USSR, described the application of the method of electrical anology to processes of radiant and complex heat-exchange. Cand.Tech.Sci. A.S. Ippolitov of the Moscow Power Institute, gave an account of 'An experimental verification of the possibility of modelling furnace processes'. Engineer S.G. Agababov, of the All-Union Thermotechnical Institute, contributed experimental data on the measurement of the emission characteristics of slags and some glasses. Eight reports were read before the session on furnaces. Dr.Tech.Sci. A.V. Kavaderov (VNIIMT) considered various problems of transient thermal conductivity with non-linear boundary conditions. Dr.Tech.Sci. M.A. Glinkov and Cand.Tech.Sci. V.A. Krivandin (MIS) gave a report entitled 'Experimental investigation of radiation from a layer of flame at non-uniform temperature'. Cand.Tech.Sci. N.A. Zakharikov, of the Kiyev Institute for Gas Utilisation, described a method of calculating heat-exchange in glass-melting furnaces. Eng. A.Ye.Yerinov, of the same Institute, reported 'An investigation of heat-exchange in furnaces with a high rate of heating'. Cand.Tech.Sci. N.A. Zakharikov and Engineer G.L. Mazayeva, also of the Kiyev Institute, explained the analysis of heat-exchange by radiation in industrial furnaces with a non-uniform temperature field

A scientific-technical session on problems of radiant heat-transfer.

Cand.Tech.Sci. M.N. Starovich, of the 'Serp i Molot' works, addressed himself to 'Intensification of radiant heat-exchange in open-hearth furnaces'. Cand.Tech.Sci. A.D. Klyuchnikov, of the Moscow Power Institute, gave a report entitled 'Generalisation of certain investigations of external heat-exchange on models of industrial furnaces'. Dr.Tech.Sci. V.F. Kopytov and Engineer V.V. Kovalenko, of the Kiyev Institute for Gas Utilisation, analysed the operation of infra-red heaters fired by gas and used for drying paint'. Dr.Tech.Sci. M.A. Glinkov and Engineer A.A. Piskunov (MIS) submitted a report on 'The application of light models to radiant heat-exchange in industrial furnaces'. Fourteen reports were read to the technical physics section. Dr.Tech.Sci. Yu.A. Surinov, of the Power Institute of the Academy of Science of the USSR, dealt with 'Zonal methods of investigating and calculating radiant heat-exchange in furnace chambers of boilers and industrial furnaces'. Cand.Tech.Sci. A.S. Newskiy (VNIIMI) reported 'An investigation of the selected radiation of various geometrical shapes. Dr.Tech.Sci. L.A. Vulis, of the Kazakh State University, spoke on 'Problems of the theory of light modelling of radiant energy exchange'. Cand.Phys. Math.Sci. V.G. Klinger, also of the Kazakh State University, recounte 'Experience of light modelling of radiant energy exchange'.

A scientific-technical session on problems of radiant heat-transfer.

Cand.Tech.Sci. L.M. Biberman and Engineer D.A. Veklenko, of the Moscow Power Institute, read a report entitled 'Radiation transfer in a discrete frequency spectrum'. Cand.Phys.Math.Sci. V.A. Prokof'y of Moscow State University, described the influence of the process of radiant energy exchange on vibrations in elastic media (gases). Dr.Tech.Sci. Yu.A. Surinov and Engineer N.A. Rubtsov, of the Power Institute of the Academy of Science of the USSR indicated the effectiveness of zonal methods of calculating radiant heat-exchange in electric resistance furnaces and layer furnaces. Dr.Tech.Sci. Surinov, also of the Power Institute, and Engineer Ya.I. Chesnokov (IGI), spoke on 'Experimental methods of investigating and determining certain fundamental characteristics of radiant heat-exchange'. Cand.Phys.Math.Sci. S.I. Shevtsov, Krasnodar Institute of the Food Industry, read a report entitled 'Radiant heat-exchange in an open band'. Cand.Tech.Sci. D.T. Kokorev (MIKhM) dealt with 'Thermal modelling of radiant heat exchange'. Cand.Tech.Sci. I.M. Maslennikov (MIKhM) gave a report entitled 'Experimental determination of certain characteristics of radiant heat exchange in processes of transient heating of bodies'. Engineer Pak-Sen-Su, of Tashkent IIT, reported 'A thermo-electric method of determining the degree of blackness of bodies'. Engineer E.A. Sidorov, Power Institute of the Academy of Science of the USSR, gave an account of 'Radiant-conductive and radiant-convective heat-exchange in an absorbing medium'.

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A scientific-technical session on problems of radiant heat-transfer.

D.I. Teplyakov, also of the Power Institute, described 'An investigation of the structure of the radiation field in solar installations with reflecting concentrators'. The decisions of the session pointed out the need to overcome the separation between theory and practice in questions of radiant heat-exchange by making analytical investigations more concrete and by improving experimental investigations on the subject. The session also decided to ask the High Pressure Steam Commission of the Power Institute of the Academy of Science of the USSR to make a systematic co-ordination of research work and to develop a unified complex plan of investigations of radiant heat-exchange. To establish closer contact and collaboration with foreign investigators on this subject, the session considered that the USSR should participate in the work of the International Committee for the Investigation of Flame Radiation.

1. Heat transfer - Theory 2. Heat exchangers - Equipment
3. Heat exchangers - Performance 4. Mathematics - Applications

AUTHORS: Shorin, S. N., Adrianov, V. N. SOV/30-58-7-33/49

TITLE: The Investigation of the Radiation Heat Exchange (Izucheniye luchistogo teploobmena)
Conference at the Institute of Power Engineering (Sessiya v Energeticheskom institute)

PERIODICAL: Vestnik Akademii nauk SSSR, 1958, Nr 7, pp. 129-130 (USSR)

ABSTRACT: This conference took place March 25 - 28, and was called by the Committee for High-Pressure, High-Temperature Steam at the Institute of Power Engineering imeni G.M. Krzhizhanovskiy AS USSR (Komissiya para vysokikh parametrov pri Energeticheskom institute im. G.M. Krzhizhanovskogo Akademii nauk SSSR). It was attended by: representatives of academic and branch institutes, of universities, of design organizations and industrial enterprises. M.A. Mikheyev, Member, Academy of Scien USSR, opened the meeting. The work of the conference was performed in sections: Furnace and firebox systems, furnace heat engineering, physical-technical section. Theoretical research was touched upon by a considerable proportion of the reports. Co.munications concerning various model representations of processes of radiation energy exchange were met with great

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The Investigation of the Radiation Heat Exchange.
Conference at the Institute of Power Engineering

interest. Apart from successful work also shortcomings in the field of experimental research were noted. In the conference the necessity was underlined to close the gap between theory and practice. The conference ordered the Commission for High-Pressure, High-Temperature Steam to coordinate research in this field in a systematic way and to work out a uniform multilateral plan of research. It was acknowledged to be expedient for the USSR to participate in the work of the International Committee for the Investigation of Flame Radiation (Mezhdunarodnyy komitet po issledovaniyu radiatsii plameni) in order to establish closer contact and collaboration with foreign scientists in the field of radiation heat exchange.

Card 2/2

24(8) PHASE I BOOK EXPLOITATION SOV/1826

Akademiya nauk SSSR. Energeticheskiy institut

Teploperedacha i teplovoye modelirovaniye (Heat Transfer and Modeling of Heat Processes) Moscow, Izd-vo AN SSSR, 1959. 419 p. Errata slip inserted. 3,500 copies printed.

Resp. Ed.: M. A. Mikheyev, Academician; Ed. of Publishing House: D. A. Ivanova; Tech. Ed.: G. M. Shevchenko.

PURPOSE: The book is intended for scientists concerned with heat transfer, heat emission, and hydraulics of liquid metals, etc.

COVERAGE: This collection is dedicated to the memory of Academician M. V. Kirpichev who in the twenties initiated a systematic investigation of heat transfer processes and the efficiency of heat apparatus. Later he led the development of research work in this field. Two special collections devoted to works of Kirpichev's school have been published, one in 1938, Materialy soveshchaniya po modelirovaniyu (Materials of the Conference on Modeling) and in 1951, Teoriya podobiya i modelirovaniye (Theory of Similitude and Modeling). The present collection prepared in 1956 represents further development of the work of this school. This theory is fundamental for the analysis of many heat problems in the field of electrical and radio engineering. Of great importance are the first systematic investigations of heat transfer and the hydraulics of liquid metals which as a new kind of heat carrier may be used in the various branches of modern engineering. As a result of special investigations of some cases of convective heat transfer, a dependence of the process on the kind of liquid, temperature, pressure, direction of the heat flow, and other factors, was discovered and established. On the basis of a wide generalization of experimental data, new dependable recommendations for heat analysis of engineering equipment were developed. Of no less interest is the work on heat transmission in boiling liquids and the condensation of vapors. All investigations are based on the theory of similitude, the nature of which, according to M. V. Kirpichev, is that of "experimentation." Work on the theory of a regular regime applied to a system of bodies with an internal source of heat is of interest for the future.

Shorin, S. N., G. I. Polyak, I. P. Kolchanova, V. N. Adrianov, and O. M. Yermolayev. Light Modeling of Radiation Heat Transfer 165
The article gives fundamentals of the theory of radiation exchange in transparent and in illuminated media. It describes sources of light and changes of illumination and gives a photographic method for measuring streams of light. Investigations of radiation exchanges in cylindrical chambers and in banks of pipes, transfer of radiation energy in an illuminated medium, local illumination of walls of boiler burners and hearth bottoms of open hearth steel furnaces are described. The following personalities are mentioned: O. Ye. Vlasov (approximate solution of a cylindrical equation), Ye. S. Kuznetsov (dispersion of radiation), Academician M. V. Kirpichev (investigation of radiation heat transfer in light models), S. A. Vulis (light modeling), G. I. Polyak, and S. N. Shorin (theory of radiation exchange), and with the cooperation of V. . Konstantinov (radiation exchanges in banks of pipes). The section on photographic Method of Measuring Light Streams" was compiled by V. N. Adrianov and G. I. Polyak; the section "Investigation of the Transfer of Radiation Energy in an Illuminated Medium" was compiled by I. P. Kolchanova, S. N. Shorin and V. N. Adrianov; sections on "Measurement of Local Illumination of Walls of Models of Boiler Burners" and "Investigation of Local Illumination of the Surface of the Bottom of an Open-hearth Furnace" were compiled by O. M. Yermolayev and S. N. Shorin. There are 27 references: 19 Soviet, 5 English, and 3 German.

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SOV/24-59-1-3/35

AUTHOR: Adrianov, V.N. (Moscow)

TITLE: Electrical Analogues Applied to Solving Radiative Heat Transfer Problems (Primeneniye metoda elektroanalogii k resheniyu zadach luchistogo teploobmena)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, Energetika i Avtomatika, 1959, Nr 1, pp 20-25 (USSR)

ABSTRACT: The discussion relates to closed systems filled with media that absorb and scatter radiation. It is shown that the integral equations that describe the exchange can be reduced, in a good approximation, to a set of linear algebraic equations identical in form with those that describe the currents and voltages in a circuit. The bodies and medium are grey, i.e. show no selective absorption and the medium also scatters radiation isotropically. The bounding surface is taken as being an ideal diffusing reflector. The integrals that result are transformed to sums to give the algebraic equations. The analogues that are proposed consist of ordinary resistors tapped across a potentiometer (Fig 2 and 3) and the voltages that occur in the circuit are

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measured by a null method. There are 3 figures, 1 table and 2 references, one of which is Soviet and 1 English.

SUBMITTED: 21st February 1958

SOV/96-59-3-18/21

AUTHOR: Adrianov, V.N., Candidate of Technical Sciences

TITLE: A Universal Enthalpy Diagram for Combustion Products of Various Fuels (Universal'naya ental'piynaya diagramma dlya produktov sgoraniya razlichnykh topliv)

PERIODICAL: Teploenergetika, 1959, Nr 3, pp 83-84 (USSR)

ABSTRACT: The enthalpy of combustion products is a function of their composition and temperature and is calculated by formula (1). This formula is accurate but its use is laborious. The object of the present article is to create a universal, accurate and at the same time simple enthalpy relationship of the type of an It-diagram for various types of fuels and excess-air coefficients. A suitable diagram is presented and in it the enthalpy of the combustion products is related to 1 cu.m of combustion products at normal temperature and pressure. It is, therefore, quite simple to generalise the enthalpy relationship for various fuels and to use the diagram to determine the values of specific heats as the ratio of the enthalpy to the temperature. The method of using the diagram is explained. It is

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valid for solid, liquid and gaseous fuels of the characteristics given in the literature referred to. The actual diagram illustrated is based on the enthalpy of the combustion products of Moscow Town gas, with an excess-air factor of 1.15. It is considered that the total error when using this diagram with correction for the excess-air coefficient and type of fuel is not greater than $\pm$ 0.5%. The corrections that must be used when particularly accurate results are required are also explained. There is 1 figure and 3 Soviet references.

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SOV/96-59-4-12/21

AUTHORS: Adriancv, V.N., Candidate of Technical Sciences and Shorin, S.N., Doctor of Technical Sciences

TITLE: An Investigation of Heat Exchange in a Gas Combustion Chamber (Issledovaniye teploobmena v kamere goreniya gaza)

PERIODICAL: Teploenergetika, 1959, Nr 4, pp 62-67 (USSR)

ABSTRACT: When a turbulent flow of gas previously mixed with air is burned the combustion process is mostly localised into a small part of the combustion chamber. Under these conditions the process of heat exchange has special features and requires special study. Purely analytical investigation of the question presents great mathematical difficulties because of the complexity of the systems of equations that describe the processes occurring in gas combustion chambers. For similar reasons it is very difficult to apply the theory of similarity to the solution of such problems. There seem, however, to be two possible approaches to investigation of the complex processes that occur in combustion chambers. The process

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of heat exchange can be investigated experimentally making use of the theory of similarity in the simplest possible devices that have real physical meaning. One variable can then be altered at a time keeping the others constant so far as possible. This approach greatly simplifies derivation of the final functional relationshi makes the results more reliable and has other practical advantages. Then the theory of similarity is developed s as to seek more general invariable links for the complex combustion processes than are given by the classical methods of the theory of similarity. This method is a synthesis of mathematical and experimental investigations and it consists essentially in extending the concept of similarity from a group of similar effects to a class and then considering more generally the conditions of uniqueness and making use of complex invariant links. In this article use is made of the first of these two proposals to investigate the influence of the hydrodynamic and optical characteristics of the medium on heat exchange in a given gas combustion chamber. The investigations were specially arranged so that a

considerable umber of invariants were maintained constant and a number of criteria were uniquely determined by the hydrodynamic criterion, the Reynolds number. The entire complex of physical effects that occur in heat exchange chambers can be represented by a system of differential and integro-differential equations. The principal equations concerned are the following:
(1) the equation of motion of viscosity of the compressed fluid for three-dimensional motion of the medium in which the coefficient of dynamic viscosity and the density are considered as variables depending on the temperature, pressure and composition of the medium at any point;
(2) the equation of mass transfer;
(3) the energy equation that represents the law of conservation of energy for each elementary volume of the medium;
(4) the combustion equation that relates the rate of the combustion reaction to the rate of supply of reacting components in the elementary volume considered, that occurs as a result of molecular and molar transfers;

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(5) the characteristic equations that relate the physical parameters of the medium to its temperature, pressure and composition;
(6) the stoichometric equations of the reacting gas-air mixture that give the relationships between changes in concentration of all the components of the reacting mixture.

By the application of the theory of similarity to this system of equations the dimensionless field of all the magnitudes required can be represented as a function of determining criteria that enter into the conditions of uniqueness. This analysis considers geometrically similar combustion chambers of given shape and arrangement of heating surfaces and also with given temperature, pressure, composition and velocity of gas mixture at inlet. The system of determining invariants is then listed. It is then shown how the system may be simplified and finally a very simple system is arrived at. The experimental apparatus is then described. It consists of a model furnace, a system for delivering dust, air and gas and arrangement for removing combustion products.

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The model furnace is illustrated in Fig.1 and consists of a calorimetric combustion chamber and cooling chamber of cylindrical shape. The experimental procedure is described. The fuel used was Moscow Town gas. Some tests were made with a dusty flame using chrome-magnesite dust of an average size of 30 microns. The equipment was fully instrumented. Using this equipment 67 tests were made with clean flames and 46 with dusty flames. The range of variation of the most important experimental factors is given. From consideration of expression (5) it is evident that the Reynolds number uniquely determined a number of other criteria and since the investigation covered quite a wide range of Reynolds number at the inlet section it would be expected that this criterion would have an important influence on the heat exchange. The nature of this influence is illustrated graphically in Fig.2, which gives the relationships of the criteria of heat exchange for the combustion and cooling chambers as functions of Reynolds number. It will be seen that these variables are

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