

SOV/143-58-11-3/16

The Determination of Losses in Enclosed Buses and Their Thermal Calculation

in a noticeable saving of non-ferrous metals. 4) Hydrogen cooling of terminal buses may also be used. In this case, hydrogen circulates inside the buses, since such circulation between the envelope and the bus is not advantageous, since it presents sealing problems. In addition, the spacing between bus and envelope must be increased. The author considers the problem of determining losses in envelopes and the thermal calculation of enclosed terminal buses. For this purpose an experimental investigation of envelope models was used [Ref 8], which shows that the distribution of circulating currents is practically independent of the length. For investigating the induced currents and the losses in envelopes of enclosed buses, the author manufactured a model of such terminal buses, shown in figure 1. For the calculations, he used the following conditions: a) the envelope has an infinite length, and b) the circulating currents are evenly distributed on the envelope. The author uses for his calculations

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the second Maxwell equation and refers to the works of C. Manneback [Ref 4] and H.B. Dwight [Ref 5], which were not used so far for calculating the losses in envelopes of large diameters. The analysis of the formulae cited in [Ref 5] shows that some of them will not produce a finite result for those envelope diameters used for high-ampere buses. The measurements performed by the author show that the current distribution in a three-phase bus system, located in one plane, is different for all three buses and depends on the phase sequence order. The currents between envelopes may attain several thousand amperes under actual conditions. The results of the investigation of losses in envelopes were compiled in tables 1 and 2. The author then presents formulae for the thermal calculation of enclosed terminal buses, using the Stefan-Boltzman formula. In his conclusion, the author states: 1) Losses in bus envelopes are commensurable with losses in buses and depend to a considerable

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degree on the distances between the axes of the phases which should be taken into consideration when designing terminals. 2) The heat losses of buses inside an envelope are smaller than the heat losses of buses in free space by 30-50%, which leads to a reduction of the continuously permissible currents by 16-30%. 3) The theoretical and experimental investigations show that models may be used for the development of new bus designs, which may be used in combination with control measurements on experimental buses. 4) Economical and reliable buses may be obtained by using oil or hydrogen cooling. There are 4 graphs, 1 diagram, 2 tables and 9 references, 6 of which are Soviet and 3 English.

ASSOCIATION: Belorusskiy politekhnicheskiy institut (Belorussian Polytechnic Institute) Kafedra elektricheskikh stantsiy (Chair of Electric Power Plants)
SUBMITTED: September 30, 1958
Card 5/5

ZAGOVSKIY, L.Ya.

The KRN-1,4 rotary cultivator. Biul.tekh.-ekon.inform. no.2:
61-63 '62. (MIRA 15:3)

(Cultivators)

ZAGOZDZON, Antoni (Wroclaw)

Problems of settlement complexes. Czasop geograf 35 no.3/4:
387-398 '64

MERGABYAN, Andranik Ambartsumovich, prof.; ZAGRABYAN, S.G., spets.
red.; KOLESNIKOVA, N.I., red. izd-va; CHACHAPANYAN, E., tekhn.
red.

[Depersonalization]Depersonalizatsia. Erevan, Armianskoe gos.
izd-vo, 1962. 354 p. (MIRA 15:12)
(PSYCHOLOGY, PATHOLOGICAL)

ZAGRADNICEK, Milan [Zahradnicek, Milan], RNDr. PhDr. (Bratislava,
Ulica Odbojarov 12)

Problem of mixed indicators in neutralizing analysis and their
use in the drug control. Acta pharmaco 6:93-112 '62

1. Kafedra farmatsevticheskoj khimii Farmatsevticheskogo fa-
kul'teta v Bratislave.

ZAGRADNICKY, J.

Etiology of anginas in children. Zhur.mikrobiol., epid. i immun.

27 no.8:121-122 Ag '56.

(MLBA 9:10)

(THROAT--DISEASES)

L 44734-66

ACC NR: AP6032883

SOURCE CODE: CZ/0083/65/000/006/0408/0411

AUTHOR: Zahradnik, M.--Zagradnik, M.

ORG: Psychiatric Clinic, Medical Faculty, UPJS, Kosice (Psychiatricka klinika lekarskej fakulty UPJS)

TITLE: Intoxication psychosis due to ingestion of methylchloride

SOURCE: Ceskoslovenska psychiatrie, no. 6, 1965, 408-411

TOPIC TAGS: psychoneurotic disorder, toxicology, poison effect

ABSTRACT: A case of a mechanic who became intoxicated with methylchloride while repairing a refrigeration system is described. After that event he suffered from depressions, and with ebrietas simplex. After 2 weeks a depressive and amnesia syndrome evolved. Reserpine treatment improved the patients's condition in 8 days. [Based on author's Eng. abst.] [JPRS: 34,161]

SUB CODE: 06 / SUEM DATE: none / ORIG REF: 006 / OTH REF: 002

Card 1/1 mjs

0920 0400

ZAGRADNIK

CZECHOSLOVAKIA / Physical Chemistry. Kinetics, Combustion, B
Explosions, Topochemistry, Catalysis.

Abs Jour: Ref Zhur-Khimiya, No 16, 1958, 52986.

Author : Zagradnik.

Inst : ~~Not given.~~

Title : N-Nitrosoderivatives of Secondary Amines. I.
Kinetics and Mechanism of Decomposition in a
Very Acidic Medium.

Orig Pub: Chem. listy, 1957, 51, No 5, 937-945.

Abstract: The rate of hydrolysis (RH) of a dimethylnitroso-
amine was studied as well as that of diethylnitro-
soamine, N-nitrosopyrrolidine, N-nitrosopiperidine,
N-nitroso morpholine, N-nitrosoproline and N-nitro-

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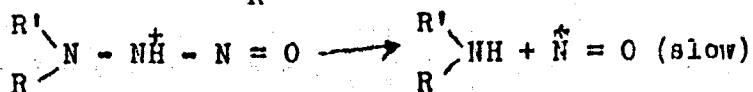
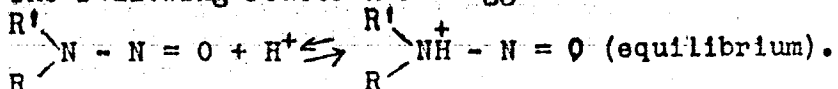
CZECHOSLOVAKIA / Physical Chemistry. Kinetics, Combustion, B
Explosions, Topochemistry, Catalysis.

Abs Jour: Ref Zhur-Khimiya, No 16, 1958, 52986.

Abstract: α -hydroxyproline in acids HClO_4 , H_2SO_4 , and HCl .

The RH obeys Hammett's equation: $\lg K = -\rho \sigma + \text{const}$.

The following reaction is suggested:



The more electrophilic R or R' are, the easier the hydrolysis proceeds. The RH of nitrosoamines in HCl proceeds ~ 2 orders faster than in HClO_4 or H_2SO_4 ; the RH also depends on the concentration of Cl^- present. The author assumes that the

Card 2/3

ZAGRADNIK

CZECHOSLOVAKIA / Analytical Chemistry. Analysis of Inorganic
Substances.

E-2

Abs Jour : Ref Zhur - Khim., No 7, 1958, No 21212 K

Author : Eli-sh, Shtovik, Zagradnik

Inst : Not given

Title : Chemical Analysis of Mineral Raw Materials. Issue 12.
Differential Thermal Analysis.

Orig Pub : Praha, CSAV, 1957, 154 s., 11., 7.54 Kcs.

Abstract : Not given.

Card : 1/1

ACCESSION NR: AR4025718

S/0081/64/000/002/8005/8005

SOURCE: RZh. Khimiya, Abs. 2B19

AUTHOR: Zagradnik, R.; Koutetskiy, Ya.

TITLE: Correlation between the reactivity and physicochemical properties of polynuclear aromatic hydrocarbons and their derivatives

CITED SOURCE: Tr. Konfarentsii po probl. primeneniya korrelyatsion. uravneniy v organ. khimii. T. 1. Tartu, 1962, 89-101

TOPIC TAGS: hydrocarbon, aromatic hydrocarbon, polynuclear aromatic hydrocarbon, aromatic hydrocarbon physicochemical property

ABSTRACT: The authors studied the empirical equation of the form $E_I - E_r = \chi A_i$, where E_I and E_r are the changes in free energy (free energy of activation) corresponding to the I and standard members of a series of structurally related compounds for the investigated reaction, and A_i is the energy of atomic localization according to Wieland. The advantage of this index in comparison with other possible characteristics of the chemical reactivity of the aromatic hydrocarbons is evaluated. The values of the magnitude χ for various atoms of the following hydrocarbons

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ACCESSION NR: AR4025718

are presented: benzene, naphthalene, phenanthrene, anthracene, triphenylene,
pyrene, chrysene, benzanthracene, tetracene, perylene, benzopyrene, and coronene.
I. Stankevich

DATE ACQ: 03Mar64

SUB CODE: OC

ENCL: 00

Card 2/2

ZAGRADNIK, Rudolf,

Kinetic equations of homogeneous reactions. Usp.khim. 30 no.10:
1272-1311 0 '61. (MIRA 14:9)

(Chemical reaction, Rate of)

ZAGRADNICHEK, O., doktor

Treatment of vitiligo with extracts of Ammi majur; on the
70th birthday of Prof. Gavalovskii. Vest.derm.i ven. no.5:43-
52 '61. (MIRA 14:12)

1. Iz dermato-venerologicheskoy kliniki universiteta imeni Karla
v Prage (zav. - doktor med.nauk prof. Yan Konopik).
(SKIN—DISEASES) (PSORALEA)

TENCHOV, G.; SAKHATCHIEV, A.; BALUEV, S.; ZAGRAFOV, D.

Prognostic value of changes in the body weight and peripheral blood
in acute radiation sickness in white rats. *Suvrem med.*, Sofia no.12:
86-92 '60.

1. Iz Katedrata po rentgenologija i radiologija pri ISUL (Rukov. na
katedrata prof. G.Tenchov)

(RADIATION INJURY exper)
(BODY WEIGHT radiation eff)
(BLOOD CELLS radiation eff)

Tagrafy, 40

PHASE I BOOK EXPLANATIONS SOV/5337

Panashkova, Ye. I., ed.

Isakhdovaniya kriticheskikh parametrov reaktorov s sistemami obratnogo svyazi (Study of Critical Parameters of Reactor Systems; Collection of Articles) Moscow, Gosatomizdat, 1950. 117 p. Kireta all inserted. 3,500 copies printed.

Trch. Ed.: N.A. Vlasova.

NOTE: This collection of articles is intended for nuclear physicists and engineers of nuclear power plants.

COVERAGE: The book contains previously unpublished original articles concerned with the theoretical calculation of neutron fluxes and of critical parameters (critical masses and volumes) of various reactor systems: uranium-graphite, uranium-beryllium, and water mixtures of uranium and plutonium. Individual articles present tables and graphs used in the determination of the dependence of critical parameters on the relative concentration and the character of the fissionable material and the moderator, as well as on fuel enrichment for a wide range of neutron energy spectra. The following are mentioned: P.A. Gavrilov (scientific editor of the collection), and S.I. Sokolov, L.M. Spashova, A. Ya. Rykova, R.P. Roschina and V.S. Vladimirov (compilers of Table 1, table of values of coefficients k_p and γ). References accompany individual articles.

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AVAILABILITY: Library of Congress

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24/Ann/Ann
7-59-51

13

ZAGRANICHNOY, V.M.

PART I BOOK EXHIBITION

307/4896

Kosovskiy dom nauchno-tekhnicheskoy propagandy i sredi
P. E. Dzerzhinskogo
Avtomaticheskoye rotornyye linii - svedeniye kompleksoy avtomatizatsii
Proizvodstva (Rotary-Transfer Machine Lines-a Review of Full
Scale Production) Moscow, 1960, 200 p. 17,000
copies printed.

Ed. L. M. Koshkina; Ed. of Publishing House: I. Tsal'berg; Tech.
Ed. G. V. Saitova; Managing Ed. for Literature on Metalworking
and Machine-Tool Making: V. I. Nitin, Engineer.

FORNOTE: The book is intended for technical personnel in the machin-
ery industry.

COVERLINE: This collection of articles explains the principles of full
automation based on the use of rotary transfer machines in various
industries. The rotary operations transfer machines used for basic
processing are discussed, and also the special power equipment and
accessories for these machines and (production) lines. Be particularly
noted, there are no references.

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AVAILABLE: Library of Congress (J1189.M6)
card 2/4

VL/cm/os
3/24/61

ZAGHANICHNYY, V.I.; POLYAKOVA, Z.A.; Prinsipali uchastiye: MAZURKVA, G.Ye.;
SHISHKINA, S.S.

Solubility in water of melamine and some of its derivatives.
Khim.prom. no.9:692-694 S '63. (MIRA 16:12)

ZAGRANICHNYY, V.I.; RUKH'VICH, O.S.

Equilibrium of the formation of melamins from urea. Khim. prom. 41
no.3:188-190 Mr '65. (ICRA 18:7)

GOL'DBERG, M.A.; ZAGRANICHENY, V.I.

Continuous method for the production of melamine from dicyandiamide.
Khim.prom. no.8:624-262 D '60. (MIRA 13:12)

1. Dzerzhinskiy filial Gosudarstvennogo nauchno-issledovatel'skogo
i proyektnogo instituta skotnoy promyshlennosti.
(Melamine) (Guanidine)

84675

S/054/60/000/000/002/000
B020/B060

15.8112

AUTHORS: Gol'dberg, N. A., Zagranichnyy, V. I.

TITLE: A Continuous Procedure of Obtaining Melamine From Dicyano
Diamide

PERIODICAL: Khimicheskaya promyshlennost', 1960, No. 8, pp. 6-8

TEXT: A highly effective and economical procedure of obtaining melamine (2,4,6-triamino-1,3,5-triazine) from dicyano diamide (the latter in its turn obtained from calcium cyanamide) was devised. The conventional industrial techniques in this respect may be classified under two groups: 1) such without solvents, and 2) such in which the reaction is performed in solvents (liquid ammonia or solutions of ammonia in aliphatic alcohols). Among the techniques belonging to the former group, the method introduced by S. N. Kazarnovskiy deserves special mention. A brief description is given of the plant at Trostenberg (German Federal Republic), and, from among the second group techniques, the method applied by the Plesteritz plant in Eastern Germany. In recent years, the authors of the article under consideration have been working at a continuous procedure of obtaining
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From Dicyano Diamide

S/064/60/000/008/002/003
B020/B060

melamine in a pilot plant with an output of 10 kg/hour. In this method a dicyano diamide solution in liquid ammonia is continuously pumped at a high speed and a pressure of 150 kg/cm² through an intensely heated spiral tube in an electric furnace. The conversion of dicyano diamide is performed in a flow of ammonia vapors. The reaction products are conveyed through a throttle into an expander sprayed with a circulating suspension of melamine in water. Melamine condenses in the form of fine-disperse particles in the suspension. The gases leaving the expander are washed with fresh water and the resulting suspension excess is led from the expander into the evaporator column, where ammonia is distilled off, led to compression and condensation, and then again used for dissolving dicyano diamide. Ammonia-free melamine in aqueous suspension is re-crystallized. The phase equilibria in the melamine - ammonia system were studied by I. R. Krichevskiy and G. D. Yefremova (Ref. 4). Fig. 1 shows two critical points of the liquid - vapor equilibrium, namely, P (134°C) and Q (245°C), where critical phenomena were observed in the presence of solid melamine. The effect of the main parameters of the process (temperature, pressure, and feeding rate of dicyano diamide in liquid ammonia) upon the melamine yield was investigated. The reaction furnace proposed

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From Dicyano Diamide

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by the authors for obtaining melamine is schematically shown in Fig. 2. The technical and economic factors of two techniques for obtaining melamine are given, and the periodic procedure applied at Piesteritz is compared with the continuous method. Results show that the continuous procedure is economically of greater advantage. There are 2 figures, 1 table, and 6 references: 3 Soviet, 2 US, and 1 German.

ASSOCIATION: Dzerzhinskiy filial GIAP (Dzerzhinsk Branch of the State
Institute of the Nitrogen Industry)

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5(1)

AUTHORS:

Gol'dberg, N. A., Zagranichnyy, V. I. SOV/20-124-3-40/67

TITLE:

The Production of Melamine From Dicyandiamide (Poluchenije melamina iz ditsiandiamida)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 3, pp 635-637 (USSR)

ABSTRACT:

All of the current industrial methods for production of melamine from dicyandiamine according to the reaction $3\text{H}_2\text{C}_2\text{N}_4 \rightarrow 2\text{H}_6\text{C}_3\text{N}_6$ are discontinued. The reaction volume shows a low specific output. - On the basis of the phase diagram of the melamine-ammonia system, a continuous process was evolved in 1955 - 1958, which is characterized by the fact that the temperature is raised beyond the critical point of 330°C (to $500 - 550^\circ\text{C}$), so that melamine is formed, not in solid phase, but as a gas or liquid. The specific output of the reaction volume could be increased by a manifold, as compared with the discontinuous methods hitherto employed. There are 3 figures and 4 references, 1 of which is Soviet.

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307/20-124-3-40/67

The Production of Melanine From Dicyandiamide

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut
azotnoy promyshlennosti, Dzerzhinsk
(State Scientific Research and Planning Institute of the Nitrogen
Industry, Dzerzhinsk)

PRESENTED: August 28, 1958, by S. I. Vol'fkovich, Academician

SUBMITTED: July 22, 1958

Card 2/2

ZAGRANICHNYY, V.I.; RUKEVICH, O.S.

Equilibrium in the formation of melamine from dicyanodiamide.
Zhur. prikl. khim. 37 no.2:433-441 F '64. (MIRA 17:9)

21.1000

77209
SOV/89-8-1-3/29

AUTHOR: Zagrafov, V. G.

TITLE: A Method for Evaluating Critical Parameters of Fissionable Materials of Arbitrary Shape

PERIODICAL: Atomnaya energiya, 1960, Vol 8, Nr 1, pp 23-28 (USSR)

ABSTRACT: Derivation of the fundamental relation. As is known, the critical state of fissionable material is characterized by the first eigenvalue γ_M of Peterls' equation:

$$\varphi(\mathbf{r}) = \frac{1}{V} \int_V \alpha(\mathbf{r}') \varphi(\mathbf{r}') K(\mathbf{r}, \mathbf{r}') dV', \quad (1)$$

where $\varphi(\mathbf{r})$ is eigenfunction, identical with neutron density distribution function in the critical state;
 $\alpha(\mathbf{r})$ is inverse mean free path of neutrons; γ is eigenvalue of the equation; and the kernel $K(\mathbf{r}, \mathbf{r}')$ is

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obtained from:

$$K(r, r') = \frac{\exp(-\int adl)}{4\pi l^2}, \quad l = |r - r'|.$$

 γ_M is identical with the material constant,

$$\gamma_M = \frac{\sigma_f + \sigma_s + \sigma_c}{\nu\sigma_f + \sigma_s},$$

where σ_f , σ_s , and σ_c are fundamental fission, scattering, and cross sections; ν is neutron number per one fission. $\Delta\gamma = \gamma_M - \gamma$ is a good measure for departure from the critical state. Nevertheless, the author finds the overestimated γ obtained usually from

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$$\gamma = \int a(\mathbf{r})K(\mathbf{r}_0, \mathbf{r}) dV.$$

to be too large. In addition, it is difficult to find the exact \mathbf{r}_0 , (location of maximum neutron density in a body of arbitrary shape). The author divides the body in question into two regions, one of which contains \mathbf{r}_0 (primary region V_1). Later, for computational convenience, he chooses V_1 to be a sphere. Integrating Eq. (1) over V_1 with $\varphi(\mathbf{r}) = \text{constant}$, and writing the integral in terms of a polar system, he obtains (after certain simplifications):

$$\frac{1-\gamma}{1-\gamma_0} = \int_{4\pi} e^{-\tau_0(\theta)} \frac{d\Omega}{4\pi}. \quad (6)$$

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where γ_0 is the γ for the primary sphere, obtainable from exact equations. The expression for $t_0(\Omega)$ is a result of approximations and is obtained as follows: To evaluate Eq. (A) one has to evaluate the integral:

$$u_\infty = \int_0^\infty adl;$$

u_∞ is the length (in units of neutron mean free path) of a ray from point r_1 to infinity. For lengths expressed in neutron mean free path units, the author uses the term "optical path lengths." u_∞ can be broken into two parts:

$$u_\infty = L + l,$$

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where L is optical length along a ray from ρ_1 to the surface of the primary region, and t is optical length along the same ray from the surface of the primary region to infinity. After radial integration of Eq. (1), L becomes L_0 as in Fig. 1.

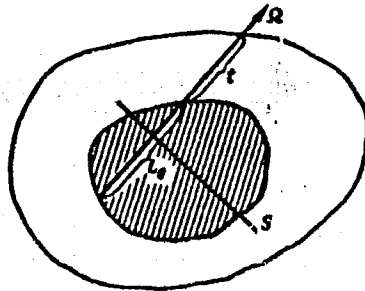


Fig. 1. Diagram explaining the process of integration.
The primary region is crosshatched.

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where S is a surface perpendicular to the direction of Ω . At this point, t is approximated by its average value over the section S , $t(\Omega)$. Finally, since in the process of integration the average of the function t is weighted with the function $(1 - e^{-L_0})$, the bulk of the contribution to the average $t(\Omega)$ originates from the central region of S . After taking the primary region in the form of a sphere, the author substitutes for $t(\Omega)$ the value $t_0(\Omega)$ of the particular ray which goes through the center of the primary sphere. This is the t_0 used in Eq. (6). This equation remains true for the case of spherically symmetrical density distribution of matter in the primary sphere, for arbitrary distribution of matter in the rest of the body, and can also be modified for the case of arbitrary matter density throughout the body. Error of this method. The author discusses the error due to the approximation in the neutron density distribution $\delta_1 \gamma$, which is always positive, and

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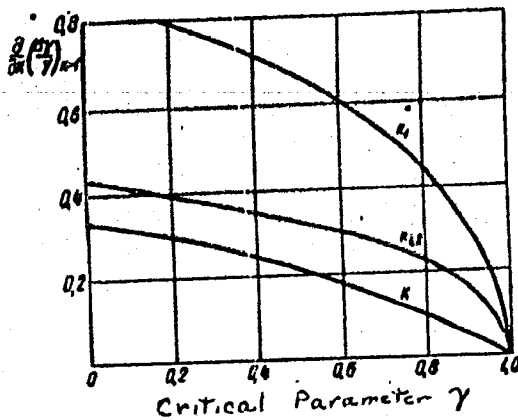
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the error due to the introduction of $t_0(r)$, $\delta_2 \gamma$, which is negative. In the limit when $V_1/V = x$ goes to zero, $\delta_2 \gamma$ goes to zero, too, and $\delta_1 \gamma$ takes its maximum value. In the opposite limit of $x = 1$ both errors go to zero. In between, $\delta_2 \gamma$ reaches its maximum value. One has to make sure that it never becomes bigger than $\delta_1 \gamma$ if the approximate γ has to be overestimated and is thereby safe for engineering uses. The most sensitive region is around $x = 1$, where $\delta_1 \gamma$ is very small. The author investigated the sign $\frac{\partial}{\partial x} \left(\frac{\delta \gamma}{\gamma} \right)_{x=1}$ by comparing expressions for $\frac{\partial}{\partial x} \left(\frac{\Delta \gamma}{\gamma} \right)_{x=1}$ computed using approximate gammas with the same expression computed exactly using perturbation theory. Fig. 3 shows the graph of those derivatives as a function of γ .

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Fig. 3. Derivations of errors at $x = 1$ versus the constant γ for the exact solution (curve k); the approximate solution without the error $\delta_2 \gamma$ (curve k_1); and for the solution containing both errors (curve $k_{1,2}$).

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Since $\frac{\partial}{\partial x} \left(\frac{\delta_1 \gamma}{\gamma} \right) = k - k_1$ and $\frac{\partial}{\partial x} \left(\frac{\delta_2 \gamma}{\gamma} \right) = k_1 - k_{1,2}$,
one sees from the graph that:

$$\left| \frac{\partial}{\partial x} \left(\frac{\delta_1 \gamma}{\gamma} \right) \right| > \frac{\partial}{\partial x} \left(\frac{\delta_2 \gamma}{\gamma} \right) \text{ and } \frac{\partial}{\partial x} \left(\frac{\delta_1 \gamma}{\gamma} + \frac{\delta_2 \gamma}{\gamma} \right) < 0.$$

which shows that the approximate γ is always over-estimated. To keep the total error as small as possible, it is advisable to use the largest possible primary sphere compatible with the dimensions of the body under investigation. Comparison of calculated and experimental data. The method was checked by comparison with the experimental results of Graves and Paxton and, in the case of two spheres, with those obtained by B. D. Stsiborskiy and M. I. Kuvshinov. Theoretical versus experimental results are as follows: Critical thickness of an infinite plate is 6.16 cm versus approximately 6.1 cm; critical radius of an infinite cylinder, 11.6 cm versus 12.4 cm; critical

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radius of a sphere 7.6-7.8 cm versus 8.7 cm. For the case of two spheres, Eq. (6) was transformed into:

$$\frac{1-\gamma}{1-\gamma_0} = 1 - \frac{\Omega}{4\pi} (1-g), \quad g = \frac{1}{\Omega} \int_{\Omega} e^{-t} d\Omega, \quad (11)$$

where $\Omega = \frac{1}{2} \left(1 - \sqrt{1 - \left(\frac{R}{b} \right)^2} \right)$ - solid angle

under which the second sphere is seen from the center of the first; b is distance between centers of the spheres; R is radius of the spheres; g is a function characterizing transparency of the spheres. This equation supplied one of the curves on Fig. 6, and was experimentally verified in the limits of experimental accuracy. The author developed equations for the case of a system of spheres, but experimental confirmation is lacking. All experimental measurements were done on Ou (93.5) (metallic U containing 93.5% of U^{235}) with

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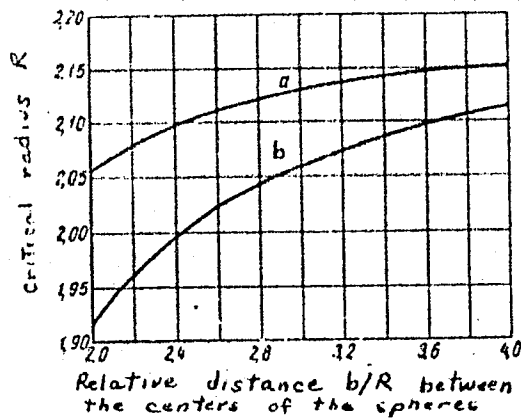


Fig. 6. Dependence of critical radius R from relative distance b/R between centers of two interacting spheres: (a) using Eq. (11); (b) using method of G. Stuart (see reference).

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of Fissionable Materials of Arbitrary Shape

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$\gamma_M = 0.74$ and $\alpha^{-1} = 4$ cm. V. A. Davidenko,
Yu. N. Babayev, and N. A. Dmitriyev helped with dis-
cussions and comments. There are 6 figures; and 6
references, 2 Soviet, 2 U.S., 2 U.K. The U.S. and
U.K. references are: G. Graves, H. Paxton, Nucleonics,
15, Nr 6, 90 (1957); G. Stuart, J. Appl. Phys., 27,
Nr 11, 1294 (1956); K. Fuchs, Proc. Phys. Soc., 62A
791 (1949); R. Peierls, Proc. Cambridge Philos. Soc.,
35, 610 (1939).

SUBMITTED: July 15, 1959

Card 12/12

BEVZIK, Yu.Ya. [deceased]; SERBO, O.S.; ZAGRANICHNIY, Yu.Ye.

Possibilities of using the KTU-2 unit in the Karaganda Basin.

Nauch. trudy KNIUI no.14:96-101 '84.

(MIRA 18:4)

BEVZIK, Yu.Ye. [deceased]; SERBO, O.S.; VORONIN, B.I.; EYDENZON, V.Ya.;
ZAGRANICHNIYY, Yu.Ye.

Wide-bench mining of coal. Nauch. trudy KNIBI no.14:109-114
'64. (MIRA 18:4)

BEVZIK, Yu.Ya. [deceased]; VORONIN, B.I.; ZAGRANICHNYY, Yu.Ye.; SERBO, G.S.;
USTINOVSKIY, M.N.; EYDENZON, V.Ya.

Working the Feliks seam in strips on the dip along its entire
thickness. Nauch. trudy KNIUI no.14:102-109 '64. (MIRA 18:4)

ZACRAIOV, Iv.

Atheism of Darwin. Nauka i tekhnika 13 no.12:20 D '61.

PALETSKIY, G.V.; DANCHENKO, B.K.; CHERMYAYEV, A.F.; ZAGRANICHNOV, G.A.;
VAYSBERG, S.B.; YEMISKIN, K.I.

Decreasing the distance between electrodes in electrolyzers.
Prom.energ. 15 no.3:20 Mr '60. (MIRA 13:6)
(Electrolysis) (Hydrogen)

TEMPER, A.S., mayor meditsinskoy sluzhby; BOKHANOV, H.V., mayor meditsinskoy sluzhby; ZAGRAALICHNYI, L.A., mayor meditsinskoy sluzhby; YEZHOV, A.S., podpolkovnik meditsinskoy sluzhby; KATASOV, S.V., podpolkovnik meditsinskoy sluzhby

Role of prophylactic additions of vitamins to food in the decrease of morbidity. Voen.-med.zhur. no.3:49-51 Mr '61. (MIRA 14:7)
(VITAMINS) (SOLDIERS—DISEASES AND HYGIENE)

ZAGRANICHNIY, P. F.

Working slide rule of the track maintenance worker, Put' 1 put.
khoz. 6 no.9:36-39 '62. (MIRA 15:10)

1. Zamestitel' nachal'nika distantzii puti, st. Kiyev, Yugo-
Zapadnoy dorogi.

(Slide rule) (Railroads—Rails—Defects)

ZAGRANICHNIY, P.F., inzh.

Useful device for loading ties on platform cars. Pat. i pat.khoz.
6 no.5143 '62. (MIRA 15:4)

1. Zamestitel' nachel'nika Kiyevskoy distantzii Yugo-Zapadnoy
dorogi.
(Loading and unloading—Equipment and supplies)

ZAGRANICHNYY, V.I.; GOL'DBERG, N.A.

Evaporation of aqueous solutions of urea. Khim.prom. no.3:166-
168 Mr '62. (MIRA 15:4)

(Urea)

GOL'DBERG, M.A.; ZAGRANICHNYY, V.I.

Preparation of melamine from dicyandiamide. Dokl.AN SSSR 124 no.3:
635-637 Ja '59. (MIRA 12:3)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut
azotnoy promyshlennosti g. Dzerzhinsk. Predstavleno akademikom S.I.
Vol'fkovichem.

(Melamine) (Guanidine)

ZAGRANICHNYY, V. I.

USSR/Chemistry - Physical chemistry

Card 1/1 Pub. 147 - 1/22

Author : Finkel'shteyn, A. I., and Zagranichnyy, V. I.

Title : Absorption spectra of triazine derivatives in the ultraviolet zone

Periodical : Zhur. fiz. khim. 29/11, 1937-1941, Nov. 1955

Abstract : Absorption spectra were obtained for nonsymmetrical triazine derivatives - ammeline (2,4-diamino-6-hydroxytriazine) and ammelide (2-amino-4,6-dioxytriazine) and formaldehyde thermal decomposition products. The study is carried out in the absorption region of melamine and in the products of its thermal decomposition proves that spectral analysis is well applicable for the determination of melamine in the presence of formaldehyde. The absorption spectra of ammeline were also given. Seven references: 1 USA, 1 USSR, 1 Germ. and 1 Eng. (1920-1950). Graphs; illustration.

Institution :

Submitted : September 6, 1953

ZAGRANOVSKIY, B.N., inzh.; FILATOV, V.F., inzh.

Device for the adjustment of remote control systems. Elek.
i tepl. tiaga 7 no.10:20 0 '63. (MIRA 16:11)

1. Chelyabinskiy uchastek energosnabzheniya Yuzhno-Ural'skoy
dorogi.

MACAVEI, I.; ZAGRANU, I.; POPESCU, N.; LEPADATU, E.

Acute rheumatismal glomerulonephrosis. Med. int., Bucur. 9 no.8:1260-1264 Aug 57.

1. Incrare efectuata in Clinica I Medicala, prof. I. Gola, si spitalul C. F. Cluj, sef de sectie dr. I. Macavei.
(GLOMERULONEPHRITIS, case reports
acute rheum. glomerulonephrosis)
(RHEUMATISM, compl.
acute rheum. glomerulonephrosis)

S/186/62/004/002/005/010
E075/E136

AUTHORS: Zagray, V.D., and Sel'chenkov, L.I.
TITLE: Chromatographic separation of microgram quantities
of neptunium and plutonium on cation-exchangers
KY-1 (KU-1) and KY-2 (KU-2)

PERIODICAL: Radiokhimiya, v.4, no.2, 1962, 181-184

TEXT: The object of the work was to develop a method of chromatographic separation of Np-237 and Pu-239 using Soviet cation exchangers. The experiments were carried out by reducing a cation-exchanger (0.5 g) with SO₂ in 0.25 N HCl containing a known amount of Np and Pu. The filtered resin was placed in a column and eluted with 0.02 N HF. The method developed gave the separation coefficient $\geq 10^3$. Np and Pu could be isolated from their mixtures in 98 ± 2% purity. Conditions for the quantitative sorption of Np on the resins were found and distribution coefficients for Np and Pu on resin KU-1 were determined for HF solutions of various concentrations. Np was eluted with 0.02 N HF and Pu with 0.5 N HF. It was found that

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Chromatographic separation of ...

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the resin used (0.3-0.4 mm) was too coarse for small chromatographic columns. Consequently the experiments were conducted under conditions in which equilibrium could not be reached. The authors concluded that the use of a more finely divided resin would lead to the elution under equilibrium conditions.

There are 3 figures and 4 tables.

SUBMITTED: August 22, 1960

Card 2/2

ZAGRAY, V.D.; VLASOV, V.A.

Chromatographic separation of small amounts of uranium from soil
using the EDE-10P anion exchange resin. Zhur.anal.khim. 17
no.2:254-255 Mr-Ap '62. (MIRA 15:4)
(Uranium--Analysis) (Ion exchange resins)

KUL'SKIY, L.A.; ZAORAY, Ya.M.; KOGANOVSKIY, A.M.

Use of a fluidized bed of cation exchangers for the removal of nonferrous and heavy metals from waste waters. Ukr. khim. zhur. 29 no.11:1228-1232 '63. (MIRA 16:12)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

ZAGRAY, Ya.M.; KOGANOVSKIY, A.M.; KUL'SKIY, L.A.

Study of the conditions of ion exchange in a fluidized bed of
cation exchangers. Ukr.khim. zhur. 29 no.12:1326-1332 '63.
(MIRA 17:2)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

ZAGRAY, Ya.M.; KUL'SKIY, L.A.; KOGANOVSKIY, A.M.

Use of a fluidized bed of cation exchangers for the removal of zinc
from sewage waters. Khim.volok. no.2:58-61 '63. (MIRA 16:5)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.
(Ion exchange) (Sewage Purification) (Zinc)

MEYERSON, S.I.; ZAGRAYEVSKAYA, I.M.; BARSKIY, Yu.P.

Temperature dependence of the heat capacity of amorphous and
crystallizing polymer gels. Koll.zhur. 26 no.1:141-142 Ja-P
'64. (MIRA 17:4)

1. Moskovskiy tekstil'nyy institut.

3/060/62/023/002/007/010

AUTHORS: Meyerson, S.I., Zagrayevskaya, I.M.

TITLE: Thermochemical and dilatometric investigations of crystallizable polymer gels

PERIODICAL: Kolloidnyy zhurnal, v. 25, no. 2, 1963, 197 - 201

TEXT: S.I. Meyerson investigated in earlier works (Koll. zh., v. 18, 1956, 447; v. 20, 1958, 353; and v. 21, 1959, 613) gelatine gels and considered their melting process as phase transition. It was of interest to investigate the effect of the nature of the initial polymer (crystalline or amorphous) on the properties of the gels formed. The phase transition, and the data for the gels obtained from the present experiments are given. Thermochemical and dilatometric studies of polyvinyl

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3/06/62/001/000/000/000

erties of the gel, and the character of phase transition gel-solution. There
are 5 figures and a table.

ASSOCIATION: Moskovskiy Tekstil'nyy Institut (Moscow Textile Institute)

JOURNAL: November 28, 1961

Card 2/2

COUNTRY : Poland H-28
CATEGORY : Chemical Technology. Chemical Products and
Their Applications--Food industry.
ABS. JOUR. : RZKhim., No. 16 1959, No. 58795
AUTHOR : Zugrdzki, S.
INST. : Not given
TITLE : Centers for Research into the Chemistry and
Technology of Food Products in Poland
ORIG. PUB. : Przem Spozywczy, 13, No 1-3, 63-66 (1959)
ABSTRACT : No abstract.

CARD: 1/1

ZAGREANU, I., dr.; RADULESCU, D., dr.

Partial abnormal drainage of the pulmonary veins. *Med. Intern.*
(Bucur) 17 no.2:177-182 F'65.

1. Lucrare efectuata in Clinica I medicala, Institutul medico-
farmaceutic, Cluj (director; acad. A. Moga).

ZAGREANU, I.; RADULESCU, D. VLAICU, R.

Contribution to the diagnosis of abnormalities of the superior vena cava. Cor vasa 6 no.1:49-56 '64.

1. F-ere Clinique Medicale, Cluj, Roumanie.

*

CIURDARIE, P. dr.; DORI, F., dr.; FLORESCU, I. dr.; ZAGREANU, I. dr.

The role of occupational factors in the appearance of hypertensive disease. Med. intern. (Bucur.) 16 no.7:835-840 J1'64.

1. Lucrare efectuată în Clinica a II-a medicală, I.M.F. [Institutul medicofarmaceutic], Cluj (director dr. I. Goia).

ZAGREANU, I., dr.; MANASIA, M. dr.

Observations on the potassium chloride test in the electrocardiographic diagnosis of coronary insufficiency. Med. intern. (Bucur.) 16 no.6:729-732 Jæ'64.

1. Lucrare efectuata in clinica I medicala, Cluj (directori: acad. A.Moga).

ZAGREANU, I., dr.; SUCIU, I., dr.; MAZIU, A., dr.

Observations on the incidence of arterial hypertension in a rural environment. Med. intern. 14 no.2:161-165 P '62.

1. Lucrare efectuata in clinica medicala I, Cluj (director: acad. Aurel Moga).

(HYPERTENSION statistics) (ENVIRONMENT)
(RURAL HEALTH)

NEKRASOV, Z.I., akademik; POKRYSHKIN, V.L., kand.tekhn.nauk; ZAGREBA, A.V.,
inzh.; KAMENEV, R.D., inzh.

Operation of blast furnaces having a capacity of 1719 m³ with
injection of natural gas. Stal' 22 no.3:199-205 Nr '62.
(MIRA 15:3)

1. AN USSR (for Nekrasov).
(Blast furnaces)

ZAGREBA, A.V.; SLINK'KO, N.F.; FEDORENKO, G.I.

Calculation and correction of the burden during the blast
furnace process. Metallurg 6 no.10:1-7 0 '61. (MIRA 14:9)

1. Krivorozhskiy metallurgicheskiy zavod. 2. Nachal'nik
domennogo tsekha Krivorozhskogo metallurgicheskogo zavoda (for
Zagreba). 3. Zamestitel' nachal'nika domennogo tsekha
Krivorozhskogo metallurgicheskogo zavoda (for Slin'ko).
4. Master Krivorozhskogo metallurgicheskogo zavoda (for Fedor-
enko).

(Blast furnaces—Equipment and supplies)

OYKS, G.N., doktor tekhn. nauk; BORODIN, D.I.; TSYKIN, L.V.; KAFUSTIN, I.V.;
SOROKIN, A.A.; KUTSENKO, A.D.; ZAGREBA, A.V.; REKHLIS, G.N.;
TRUSEYEV, A.I.; Prinsipalni uchastiye: GUBENKO, S.M.; FOMIN, S.I.;
KUBLITSKIY, A.M.; SAF'YANOV, V.P.; VOLYNKIN, V.M.

Some problems in the hydrodynamics of a converter bath. Met.
i gornorud. prom. no.3:29-31 My-Je '65. (MIRA 18:11)

STARSHINOV, B.N.; SINITSKIY, V.D.; SEN'KO, G.Ye.; GULYGA, D.V.; BABIY, A.A.;
KHORUZHIIY, A.G.; Primalni uchastiye; OSTROUKHOV, M.Ya.; SAVELOV,
N.I.; PLISKANOVSKIY, S.T.; MOISEYEV, Yu.G.; LAVPENT'YEV, M.I.;
TARASOV, F.P.; ZAGREBA, A.V.; KAMENEV, R.D.; TKACHENKO, A.A.;
FREYDIN, L.M.; LUKIN, P.G.; POPOV, Yu.A.; MISHIN, P.P.; KARACHENTSEV,
M.D.; DOLMATOV, V.A.; AYUKOV, A.S.; PALAGUTA, V.P.; VYAZOVSKIY, Yu.V.;
SOLODKIY, Yu.A.; KONAREVA, N.V.; SAPRONOV, Yu.V.; SINITSKAYA, S.K.;
SAPRONOV, B.V.; LEKAREV, V.L.; STOLYAR, V.V.; PROKHORENKO, Z.A.;
BANDINA, Ye.Ye.

Results of the first year of operation of large capacity blast
furnaces. Sbor. trud. UNIIM no.11:34-46 '65.

(MIRA 18:11)

PARIMONCHIK, I.B.; SOROKIN, A.A.; ZAGREBA, A.V.; YAKOVLEV, Yu.N.;
PAVLOVTSEVA, N.I.; UL'YANOV, D.P.; FURS, I.L.

Studying metal flow in the top pouring of rail steel by
high-speed motion picture photography. Stal' 24 no.5;
414-417 My '64. (MIRA 17:12)

ZAGREANU, I., dr.; VLAICU, R., dr.; RADULESCU, D., dr.

Low aortopulmonary communication. Med. Intern. 14 no.8:951-958
Ag '62.

1. Lucrare efectuata in Clinica I medicala I.M. F. Cluj (director:
Acad. A. Moga).

(AORTIC DISEASES) (PULMONARY ARTERY)
(HEART DEFECTS, CONGENITAL)

NANA, A.; MIRCIOIU, C.; NEUMANN, E.; POP, POPA D.; PITEA, P.; ZAGREANU, I.

Adaptation of the heart in shock. (Role of cardiac innervation in the maintenance of hemodynamic equilibrium). Rev. sci. med. 6 no.3/4: 169-172 '61.

(SHOCK physiology)
(BLOOD CIRCULATION)

(HEART physiology)
(NERVOUS SYSTEM physiology)

MOGA, A., acad;; SUCIU, I., dr.; ZAGREANU, I., dr.

Epidemiological investigations of hypertensive disease. Med. intern.
14, no.4:555-559 My '62.

1. Lucrare efectuata in Clinica I medicala, I.M.F. Cluj.
(HYPERTENSION) (MORBIDITY)

MOGA, A., acad.; ZAGREANU, I., dr.; COFARU, D., dr.

Comparative study of the incidence of asthenic neuroses with predominantly cardiovascular symptoms in urban and rural environments. Med. intern. 14 no.4:595-598 My '62.

1. Lucrare efectuata in Clinica I medicala, I.M.F. Cluj.
(NEURASTHENIA) (CARDIOVASCULAR DISEASES)
(RURAL HEALTH) (ENVIRONMENT)

MOGA, A., acad.;-ZAGREANU, I., dr.; SUCIU, I., dr.; SIMPLACENAU, A.; SAVU, I.,
conf.

Considerations on the contribution of environmental physical factors
to the distribution of rheumatic heart disease. Med. Intern. 14 no.4:
599-602 My '62.

1. Lucrare efectuata in Clinica I medicala si la Catedra de geografie
a Universitatii "Babes-Bolyai", Cluj.
(RHEUMATIC HEART DISEASE) (WEATHER) (CLIMATE)
(HOUSING) (CLOTHING)

ZAGREANU, I., dr.; POPESCU, T., dr.; STOICA, D., ing.

Observations on the incidence of myocardial infarct as a function of meteorological factors. Med. intern. 14 no.4:609-614 My '62.

1. Lucrare efectuata in Clinica I medicala, I.M.F. Cluj si Centrul de meteorologie din Cluj.
(MYOCARDIAL INFARCT) (WEATHER) (PERIODICITY)

ZAGREANU, I., dr.; VAGAUNESCU, Gh., dr.; SUCIU, I., dr.

Observations on the value and method of performing clinical examinations
in the epidemiological study of cardiovascular diseases. Med. intern.
14 no.4:621-624 My '62.

1. Lucrare efectuata in Clinica I medicala, Cluj, director acad. A. Moga.
(CARDIOVASCULAR DISEASES) (RURAL HEALTH)
(HEALTH SURVEYS)

RADULESCU, D. , dr.; ZAGREANU, I., dr.; POPESCU, T.A., dr.; CORNEA, I., dr.;
GELEPU, V., dr.

Value of radiological examination in the epidemiological study of
cardiovascular diseases. Med. intern. 14 no.4:625-628 Ny '62.

1. Clinica I medicala I.M.F. Cluj (for Radulescu, Zagreanu, Popescu).
2. Centrul de radiomicrofotografie Cluj (for Cornea, Gelepu).
(CARDIOVASCULAR DISEASES) (RADIOGRAPHY)
(FLUOROSCOPY) (MASS SCREENING TECHNIQS)

ZAOREANU, I., dr.; VLAICU, R., dr.; RADULESCU, D., dr.

Considerations on the contribution of the electrocardiogram in the epidemiological study of cardiovascular diseases. Med. intern. 14 no.4;629-632 My '62.

1. Lucrare efectuata in Clinica I medicala I.M.F., Cluj, director: acad. A. Moga.

(CARDIOVASCULAR DISEASES) (ELECTROCARDIOGRAPHY)
(MASS SCREENING TECHNIQS)

ZAGREANU, I., dr.; UZA, G., dr.; RUTNARIU, dr.

Observations on the electrophonocardiographical aspects of acute renal insufficiency. Med. intern. 13 no.11:1499-1505 II '61.

1. Lucrare efectuata in Clinica I medicala, Cluj (director acad. A. Moga)

(ACUTE RENAL FAILURE complications)
(HEART DISEASES etiology)
(ELECTROCARDIOGRAPHY)
(PHONOCARDIOGRAPHY)

ZAGREANI, I.; VLAICU, R.

Contribution to the diagnosis of isolated congenital stenosis of
the branches of the pulmonary artery. Stud. cercet. med. intern.
5 no.3:279-285 '67.

OYKS, G.N., doktor tekhn. nauk; BORODIN, D.I.; TSYKIN, L.V.; KAPUSTIN, I.V.;
SOROKIN, A.A.; KUTSENKO, A.D.; ZAGREBA, A.V.; TRUCEYEV, A.A.;
REKHLIS, G.N.

Effect of the condition of the slag on the intensity of ejections
during the Bessemer production of steel. Met. i gornorud. prom.
no.1:24-28 Ja-F '65. (MIRA 18:3)

OYKS, G.N., kand. tekhn. nauk; SOROKIN, A.A.; KAPUSTIN, I.V.; TSYKIN, L.V.;
BORODIN, D.I.; KUTSENKO, A.D.; RYKHITS, G.N.; ZAGREBA, A.V.;
UL'YANOV, D.P.; TRUSEYEV, A.I.

Trends in the reorganization of the Bessemer furnace
department at the Dzerzhinskii Plant. Met. i gornorud.
prom. no.3:28-30 My-Je '64. (MIRA 17:10)

ZAGREBA, A.V.; SLIN'KO, N.F.; FEDORENKO, G.I.

Blowing-out and the operations of a blast furnace with a 2000 m³
capacity. Metallurg 7 no.1:8-13 Ja '62. (MIRA 15:1)
(Blast furnaces)

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S/187/60/000/012/003/005
D035/D113

9.4310

AUTHORS:

Rodkevich, S.D.; Golubkov, A.P.; Zagreba, V.A.

TITLE:

Aspects of using phototransistors

PERIODICAL:

Tekhnika kino i televideniya, 1960, no. 12, 56-62

TEXT: The authors furnish the results of investigations of the basic parameters of phototransistors, made from П6 (P6) transistors. More than 50% of the phototransistors produced from a batch of transistors selected at random had a photosensitivity of more than 1a/lm. The maximum sensitivity in some specimens ranged between 8 and 10 a/lm. The following parameters were investigated: (a) transistor current photosensitivity (φ_{it}); (b) resistance to alternating current in the dark (R_{it}); (c) permissible voltage at the collector (U_{ct}); (d) mean value of the dark current at the slanting section of the volt-ampere characteristic (I_{ct}). These parameters were graphically determined from the static and dynamic volt-ampere characteristics; the former were determined using a voltmeter and an ammeter,

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whilst the latter were determined with a 50-Hz alternating current by means of a "characteriograph" which permitted the volt-ampere characteristics to be simultaneously read in the dark, and at any preset illumination of the phototransistor on the screen of an 3HO-1 (ENO-1) oscillograph. The mean parameters that were found for phototransistors with a "floating" base showed that such phototransistors would be inefficient if used for recording small light fluxes with subsequent amplification. Therefore, the parameters had to be controlled either by a weak connection between the base and the emitter through a high resistance of $0.1 - 1$ M-ohm, or by using a positive fixed bias or self-bias in relation to the emitter in the base circuit. At an optimum bias of 0.5 V, fed through a resistance of 100 k-ohm, the phototransistor's basic parameters change as follows: I_{ct} decreases from 50 ("floating" base) to 5 μ A ("bound" base); R_{it} increases from 10^7 to 10^7 ohms; U_{cd} increases from 6 to 12 V (d-diode); and φ_1 decreases from 8 to 4 a/lm. The graphic calculation and the experiment showed that by changing the bias current in the base at $F=2 \times 10^{-5}$ lm, $R_1=700$ k-ohm (R_1 = load resistance), and $U_{co} = 21$ V (U_{co} = optimum collector voltage),

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D035/D113

Aspects of using ...

the real value of the voltage photosensitivity (φ_u) can be increased from 8×10^4 to 6×10^5 V/lm, i.e. almost tenfold. The noise characteristics of phototransistors were investigated by means of a wide-band audio frequency measuring amplifier with a large input resistor and a square-law detector at the output. It was revealed that in both systems ("floating" and "bound" base) an increase in photosensitivity entails a tenfold increase in the signal-to-noise ratio, provided that the optimum operating conditions are chosen. At a signal-to-noise ratio equalling 10, the minimum flux that can be measured is 10^{-6} lm ("floating" base) and 10^{-7} lm ("bound" base). The frequency response of phototransistors was investigated with a neon lamp fed from an audio frequency generator. It was found that by using a "bound" base circuit, the frequency properties of the phototransistors can be improved by approximately 1 order. Investigations showed that industrial plants producing P6 transistors can start the production of phototransistors without considerably changing the production technology. The phototransistors are not suitable for measuring small illuminances, due to their small working surface (2 mm^2). The minimum illuminance at a signal-to-

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27011

S/187/60/000/012/003/005
D035/D113

Aspects of using

noise ratio of 10 is $E_{min} = 0.05$ lx. There are 9 figures, 3 Soviet-bloc and 2 non-Soviet-bloc references. The one reference to the English-language publication reads as follows: Wireless World, 1958, VIII, v. 764, no. 8, 391-394.

4

Card 4/4

ZAGREBAYEV, G.I., inzh.

Competition and exchange of advanced practices in the peat
enterprises of Moscow Province. Torf.prom. 39 no.4:5-9
'62. (MIRA 15:7)

1. Mosoblsovmarkhoz.
(Moscow Province--Peat industry)
(Socialist competition)

ZAGREBAYEV, I. I.

Pastures

Running sheep on winter pastures of the "Chernye zemli." Korm. basa, 2, no. 10, 1951

Monthly List of Russian Accessions, Library of Congress, May 1952. UNCLASSIFIED.

ZAGREBAYEV, I. I.

Sheep

Getting sheep ready for winter and running them on winter pasture on the "Chernye Zemli" government lands. Sots. zhiv. li, No. 9, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified

ZAGREBAEV, I. I.

USSR/Meadow Cultivation - The Meadow.

K-1

Abs Jour : Referat Zhur - Biologiya, No 16, 25 Aug 1957, 69148

Author : Zagrebaev, I., Shtraukhman, E.

Inst :

Title : Experiment in Improvement of Marchy Meadows and Swamps.

Orig Pub : S. kh. Sibiri, 1956, No 6, 46-50

Abstract : Experiments were conducted in 1954-1956 on two collective farms of the Omsk district on an area of 1000 hectares. The bushes were cut down by a cutting machine or were burned down. The lifting of the upper layer was done by a bush plough with disks of 2 to 3 tracks or by milling. Milling gave best results. Before sowing, the soil was rolled by waterspraying rollers. The sowing took place in June. On peat bog soils the oat harvest yielded 16 to 18 centners per hectare, sunflower for silage, 150-210 centners per hectare, turnips, white cabbage, 350-500 centners per hectare. On sections with a lighter layer of

Card 1/2

- 12 -

USSR/Meadow Cultivation - The Meadow.

K-1

Abs Jour : Referat Zhur - Biologiya, No 16, 25 Aug 1957, 69148

turf and on peat bog salty meadow soils, turnips, cabbage and grasses produced low yields. On the third year after plowing with milling operations the growth of grasses is well restored -- that of safflower(?) (svetlukha).

Scolochloa, reed, cane, foxbrush, etc. 16 to 42 centners per hectare of safflower (svetlukha) hay was harvested.

Card 2/2

- 13 -

SHTRAUKHMAN, E.A.; ZAGREBAYEV, I.I., kand.sel'skokhozyaystvennykh nauk,
starshiy nauchnyy sotrudnik

Improving natural hayfields and pastures on virgin lands in
Omsk Province. Zhivotnovodstvo 23 no.6:65-68 Je '61.

(MIRA 16:2)

1. Direktor Alekseyevskogo sovkhosa, Omskoy oblasti (for
Shtraukhman). 2. Sibirskiy nauchno-issledovatel'skiy institut
sel'skogo khozyaystva (for Zagrebayev).
(Omsk Province--Pastures and meadows)

ZAGHREBAYEV, I. I.

Improvement of natural hayfields and pastures in Dnestr province.
(MINK 17:7)

Trudy TSSBS no. 6:410-424 '63.

ZAGREBAYEV, Viktor Dmitriyevich; ALEKSEYEVA, R.L., red.; POPOVA, H.A.,
tekh.n.red.

[Contribution of the city to the collective farm village;
practices of the Oktyabr'skiy District of Rostov-on-Don. Gorod -
kolkhoznai derevne; iz opyta Oktiabr'skogo raiona g. Rostova-na-
Donu. Rostov-na-Donu, Rostovskoe knizhnoe izd-vo, 1956. 19 p.
(MIRA 12:3)]

1. Sekretar' raykoma Kommunisticheskoy partii Sovetskogo Soyuza
(for Zagrebayev). (Collective farms)

BEYLINSON, A.V.; TROITSKIY, V.L.; VITOKHINA, T.A.; KAULEN, D.R.; SHUFER, R.L.;
ZAGREBEL'NAYA, T.M.

Gamma-irradiation as a sterilization factor in the process of preparing
purified sera. Zhur.mikrobiol., epid. i immun. 32 no.11:6-12 N '61.
(MIRA 14:11)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.
(SERUM) (RADIATION STERILIZATION)