

GABOS, GY.

TECHNOLOGY

PERIODICAL: MAGYAR EPITŐIPAR. Vol. 7, no. 7, July 1958

Gabos, Gy. Instruments in the service of engineering work. p. 314.

Monthly list of East European Accessions (EEAI) LC, Vol. 8, No. 2,
February 1959, Unclass.

FRANC, H.; GRIFFIN, I.; WY, A.

Of all unifying experiences in the Soviet Union. . . .

FRANZ SPINER. (Eitovari Erdemnos szegedlet) Budapest, Hungary.
Vol. 9, no. 10, Oct. 1959.

Monthly List of East European Accession. (SOM) 10, vol. 1, no. 1, Dec. 1960

Uncl.

GABOS, GY.

Let us use cement-stabilized soils for base material for buildings,
p. 505.

Magyar Epitoipar. (Epitoipari Tudományos Egyesület) Budapest,
Hungary. Vol. 8, no. 11, 1959

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

GABOS, Gyorgy; TARJAN, Laszlo

National contest entitled "Foundation on Volume-changing Soils"
announced by the Ministry of Construction. *Magy ep ipar* 10 no.6:
259-265 '61.

GABOS, Gyorgy

The 1961 research activity of the Geodetic and Soil Testing Enterprise of the Ministry of Construction. Epites szemle 6 no.3:86-88 '62.

1. Epitesugyi Miniszterium Foldmero es Talajvizsgale Vallalat igazgatoja

GABOS, Gyorgy

Utilization of expert opinions of soil mechanics in the building industry. Magy ep ipar ll no.2:60-63 '62.

GABOS, Gyorgy, okleveles mernok

Work in the field of geodetic technical development at the Surveying and Soil Testing Enterprise of the Ministry of Construction. Geod kart 14, no.5:339-342 '62.

1. FTI igazgatoja, es "Geodezia es Kartografia" szerkeszto bizottsagi tagja.

VAJDA, Jozsef, okleveles mernok; GABOS, Gyorgy, okleveles mernok; GYORGY, Istvan, okleveles mernok; STELCZER, Karoly, okleveles mernok; SZERENYI, Laszlo, okleveles mernok

Significance of water quality in water economy. Hidrologiai kozlony 41 no.3:177-187 Je '61.

1. Orszag vizugyi foigazgatohelyettes (for Vajda).
2. Foldmoro es Talajvizsgalo Vallalat igazgatoja (for Gabos).
3. Vizugyi Tervezo Iroda igazgatoja; "Hidrologiai Kozlony" szerkeszto bizottsagi tagja (for Gyorgy).
4. Vizgazdalkodasi Tudomanyos Kutato Intezet igazgatoja (for Stelczer).
5. Melyepitesi Tervezo Vallalat igazgatoja (for Szerenyi).

S/081/62/000/022/063/088
B166/B144

AUTHORS: Muresan-Kertesz, I., Albu, I., Gabos, M.

TITLE: Production and properties of polyacrylate latexes. 1.
Effect of production conditions on conversion

PERIODICAL: Referativnyy zhurnal. Khimiya, no.22, 1962, 497-498,
abstract 22P152 (Studia Univ. Babeş - Bolyai. Chem.; no. 2,
1960, 53-62 [Rom.; summaries in Russ. and French])

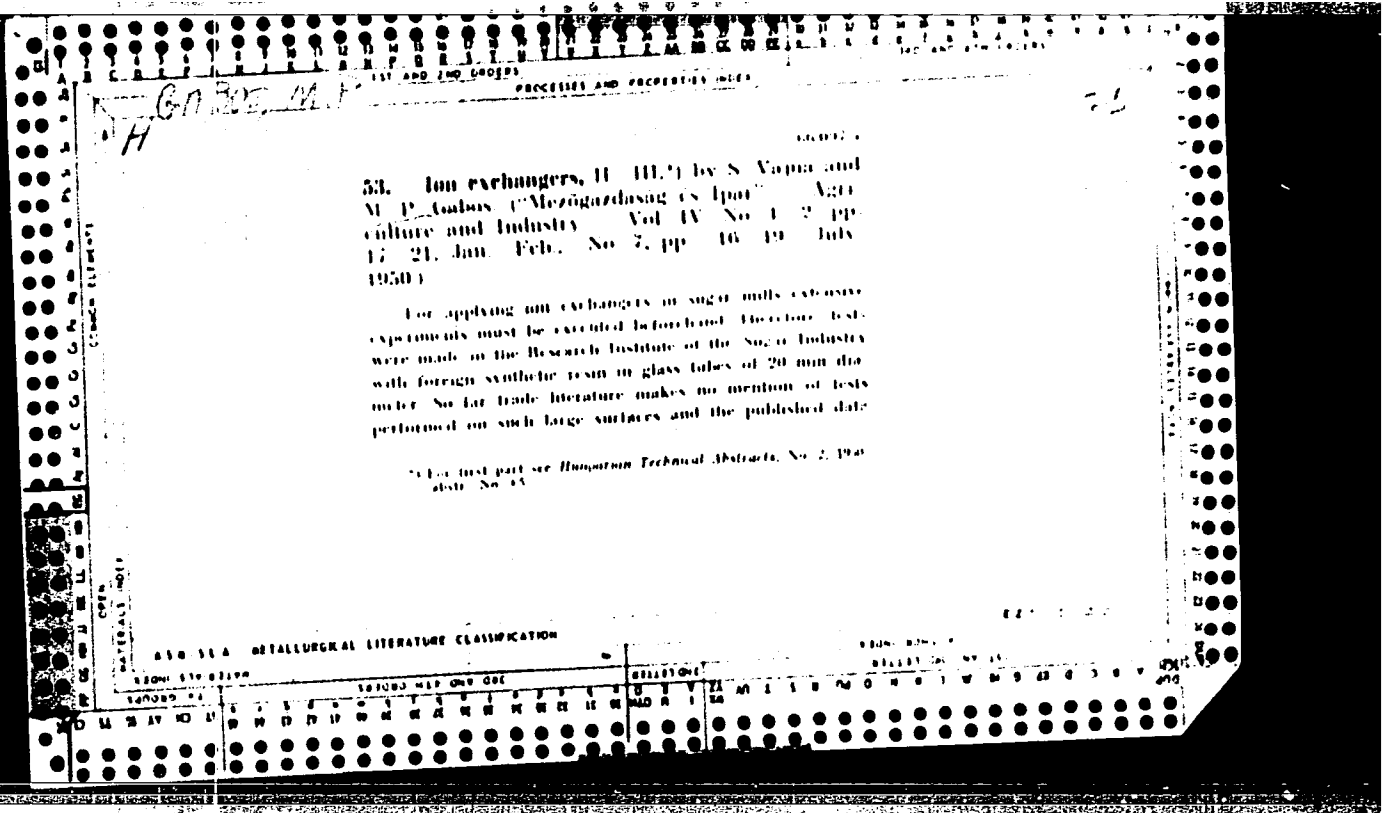
TEXT: The article gives the results of a study of how the nature and concentration of the emulsifier, and of the monomer (ethyl acrylate), and the polymerization time, affect the "useful conversion" (ratio of the amount of polymer formed in the finely disperse state to the total quantity of polymer calculated from the initial quantity of monomer).. The object of the study was to produce a storage-stable latex (absence of sedimentation after storage for 1 year). [Abstracter's note: Complete translation.] ✓

Card 1/1

WITTENEERGER, C.; GABOS, Marta

Investigations on the muscular adenylic nucleotides in rat ontogenesis. Studii cerc biol s. zool 17 no.1:85-91 '65.

1. Section of Animal Physiology, Center of Biological Research, Rumanian Academy, Cluj Branch, and Chair of Animal Physiology, Faculty of Natural Sciences and Geography, "Babes-Bolyai" University, Cluj. Submitted October 27, 1964.



The first of these points is an increase in the concentration of the solution. It is well known that the rate of evaporation of a liquid increases with an increase in the surface area of the liquid. In the case of a solution, the surface area of the liquid is proportional to the area of the container. Therefore, the rate of evaporation of a solution increases with an increase in the area of the container. This is the first point.

The second point is an increase in the temperature of the solution. It is well known that the rate of evaporation of a liquid increases with an increase in the temperature of the liquid. In the case of a solution, the rate of evaporation increases with an increase in the temperature of the solution. This is the second point.

The third point is an increase in the degree of turbulence of the solution. It is well known that the rate of evaporation of a liquid increases with an increase in the degree of turbulence of the liquid. In the case of a solution, the rate of evaporation increases with an increase in the degree of turbulence of the solution. This is the third point.

The fourth point is an increase in the degree of saturation of the solution. It is well known that the rate of evaporation of a liquid increases with an increase in the degree of saturation of the liquid. In the case of a solution, the rate of evaporation increases with an increase in the degree of saturation of the solution. This is the fourth point.

GABOS. 2.

Category: Rumania / Physical Chemistry-Molecule. Chemical bond

B-4

Abs Jour: Referat Zhur-Khimiya, No 9, 1957, 29546

Author : Gabos Z., Maurer I.

Inst : Jassy Filiate of Rumanian Academy of Sciences

Title : Contribution to the Study of H_2^+ IonOrig Pub: Studii si cercetari stiint. Acad. RPR Fil. Jasi, 1954, 5, No 1-2,
79-86

Abstract: The authors consider the chemical bond of H_2^+ , on the basis of an objective existence of electron orbit. It is assumed that in H_2^+ the "mutualized" electron describes about the two nuclei a trajectory of the type of a lemniscate. "Mutualization" of the electron takes place on convergence of nuclei within 1.36 A. On considering in this connection the energy of H^+ as the sum of minimum energy of vibration of the nuclei along the axis that joints them, and assuming the vibration quantum number $v=1$, minimum electron energy is calculated as 16.29 ev and energy of dissociation as 2.75 ev, which is close to calculation results according to wave mechanics. It is noted that it was possible to find a simple explanation for the necessity of taking into account the energy at absolute zero.

Card : 1/1

-1-

Gabos, Zoltan

RUMANIA/Theoretical Physics

B-2

Abs Jour : Referat Zhur - Fizika, No 5, 1957, No 10815

Author : Gabos Zoltan

Inst : University "Bolyai", Cluj, Rumania

Title : Concerning the Problem of Investigation of the Gravitational Field.

Orig Pub : An stiint Univ. Iasi. Sec 1, 1955, 1, No 1-2, 191-199

Abstract : As was shown by the author previously, the gravitational field of the sun, acting on a moving planet, is described by specifying certain vector and scalar potentials. Using the explicit form of these potentials, the author obtains for the shift in the mercury perihelion a value close to the observed one. In the case of motion of a photon the only thing of importance is its interaction with a scalar potential; the latter leads to the same value of a red shift, as follows from the general theory of relativity.

Card 1/1

Direct Derivation of the Hamilton-Jacobi Equations of the Newton Type in the Special Theory of Relativity

Gabos, Z.; et Deutsch, R. V. Dédution directe de l'équation Hamilton-Jacobi des équations du type Newton dans la théorie de la relativité restreinte. Acad. R. P. Roum. Fil. Cluj. Stud. Cerc. Mat. Fiz. 7 (1956), no. 1-4, 79-90. (Romanian. Russian and French summaries)

By adopting several of the principles which the reviewer set as a basis of mechanics (broadening Newton's), the authors deepen the function accomplished by the principle of least action and its relation to Hamilton-Jacobi's equation, concerning the set of possible movements of a material point in a field characterized by a quadridimensional potential (three components for the potential vector and one for the scalar potential).

The corresponding mass is the relativistic one. The development of this paper gives rise to interesting observations.

O. Onicescu (Bucharest)

3
I-FW

GABOS, Z.

RUMANIA/Theoretical Physics - Quantum Mechanics

B-4

Abs Jour : Ref Zhur - Fizika, No 10, 1958, No 22074

Author : Melezienn A., Gabos Z.

Inst : Not Given

Title : Certain New Investigations on the Foundations of Quantum Mechanics

Orig Pub : An. Rom.-Sov. Ser. mat.-fiz., 1957, 11, No 4, 83-88

Abstract : No abstract

Card : 1/1

1

RUMANIA/Theoretical Physics - Relativity. Unified Field Theory.

B-

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000513920016-4

Abs Jour : Ref Zhur Fizika, No 3, 1960, 5030

Author : Gabos Zoltan

Inst :

Title : On Gravitational Potentials, I.

Orig Pub : Studii si. cercetari stiint. Acad. RPR Fil. Iasi, Fiz. si stiinte tehn., 1958, 9, No 1, 63-69

Abstract : Using the Schwarzschild metric, the author shows that a weak gravitational field can be described by a potential in the form of a 4-vector $\{A_\alpha, \{g_{\alpha\beta}\}$

$$\text{where } A_\alpha = (\lambda v_0/r) x_\alpha + \dots, g_{\alpha\beta} = -(\lambda \cdot m_0 c^2 / r) (1 + \lambda / 2r - v^2 / 2c^2 - r^2 c^2) \lambda$$

is the parameter of the Schwarzschild metric. --
A.A. Borgardt

Card 1/1

- 3 -

GABOS, Zoltan

On the Lagrange function in the generalized theory of relativity.
Studia fiz tehn Iasi 10 no.1:1-8 '59. (EBAI 9:3)

1. Filiala Iasi a Academiei Republicii Populare Romine.
(Relativity(Physics)) (Dynamics)
(Gravitation)

GABOS, Zoltan

Contributions to the study of the applicability of the Hamilton-
Jacobi theory. I. Studii fiz tehn Iasi 10 no.1:105-110 '59 (REAI 9:3)
(Dynamics) (Spaces, Generalized).
(Transformations (Mathematics))

GABOS, Z.

Lagrange's equivalents in the generalized theory of relativity.
Studii fiz tehn Iasi 10 no.2:201-205 '59. (EEAI 9:9)
^ (Relativity (Physics)) (Dynamics)

GABOS, Z.

Contributions to the study of the applicability of the Hamilton-Jacobi theory. II. Studii fiz tehn Iasi 11 no.1:79-88 '60.

(EBAI 10:3)

(Transformations (Mathematics))

(Series, Lagrange's) (Pfaff's problem)

(Functions) (Calculus of variations)

GABOS, 2.; MINZAT, L.

Maximum work. Studii fiz tehn Iasi 13 no.2:285-289 '62.

GABOS, Z.; GHERMAN, O.

Observations on the symmetry properties of the Dirac field.
Studia Univ B-B S. Math-Phys 9 no.2:83-93 '64.

GABOS, Z.; SIMON, Eva

Contributions to the relativistic study of electron polarization. Studia Univ B-B S. Math-Phys 10 no.1:115-129 '65.

C.A.
BARKS, Peter M.

New method for the determination of calcium. Sándor Vajna and Mária Galus-Putler (Research Inst. for Sugar Industry, Budapest, Hungary; *Magnes. Kém. Folyóirat* 50, 631 (1958)). -- Make the soln. ammoniacal, then add a slight excess of AcOH and a known vol. of standard $(NH_4)_2C_2O_4$ soln. After 4 hrs., filter and titrate the excess C_2O_4 in an aliquot part of the filtrate with $KMnO_4$. 1. Pinkly

L 64439-65 ENT(1)

ACCESSION NR: AP5012630

UR/0051/65/018/005/0908/0911
535.233

AUTHORS: German, O; ^{44.55} Gabosh, Z. ^{44.55}

33
B

TITLE: On the thermal radiation of substances

SOURCE: Optika i spektroskopiya, v. 18, no. 5, 1965, 908-911

TOPIC TAGS: thermal radiation, solid state, liquid state, electric field, refractive index

ABSTRACT: The authors present a theoretical analysis of the polarization of thermal radiation from hot solid and liquid bodies, inasmuch as it turns out that this yields certain information on the physical properties of the substances. A general expression is written, by using Fresnel's formulas for the components of the electric field of the beam emerging from the surface of a hot metal, as functions of the components of the incoming beam. The degree of polarization is determined by using the Stokes parameters. It is shown that the degree of polarization depends in a complex manner on the angle of

Card 1/2

L 64489-65

ACCESSION NR: AP5012630

refraction, on the material constants, and on the frequency. The angle of refraction is the angle of the emerging beam. Maximum polarization is when this angle is $\pi/2$. It is thus shown that the refractive index of bodies can be determined from the measurement of the degree of polarization emitted at an angle of 90° . Since there is dispersion, all measurements must be made in a narrow frequency interval, and in the case of dielectrics it is necessary to work with a continuous spectrum. Orig. art. has: 1 figure and 14 formulas.

ASSOCIATION: None

SUBMITTED: 19 Jun 64

ENCL: 00

SUB CODE: OP

NR REF SOV: COO

OTHER: 003

llc
Card 2/2

SADIK, O.Z.; GABOV, A.A.

Readers' comments on our periodical. Med. sestra 22 no.1:63-64
Ja '63. (MIRA 16:7)

1. Zamestital' glavnogo vracha Yaroslavskoy oblastnoy klinicheskoy
bol'nitsy, chlen redaktsionnogo soveta zhurnala "Meditsinskaya
sestra" (for Gabov).
(NURSES AND NURSING—PERIODICALS)

MYSLYAYEVA, A.V., kand. med. nauk; ZAKHVATKINA, I.A.; SVERDLOV, S.L.;
ANDREYEV, I.D., dotsent; GENADINNIK, I.S., kand. med. nauk;
KUZNETSOV, A.A., NIKOLAYEVA, G.V., prof.; SILAKOVA, V.V., dotsent;
SEAMLYAN, N.P.; FRIDMAN, M.H., dotsent; CORBYLEV, M.N.; SIGAL,
Ye.S., zasluzhennyy vrach RSFSR; KHOLOPOVA, L.K.; GABOV, A.A.;
LILEYEV, V.A.; MAKAREVICH, Ya.A., kand. med. nauk; SHELEPIN, A.S.;
SHMELEV, M.M.; PEVZNER, G.I.; SILAYEV, Yu.S.

Abstracts. Sovet. med. 27 no.6:140-145 Je'63 (MIRA 17:2)

1. Iz kafedry propedevtiki ~~vnutrennikh~~ bolezney i patologicheskoy anatomii Kazakhskogo meditsinskogo instituta (for Myslyayeva, Zakhvatkina).
2. Iz Novozybkovskoy mezhrayonnoy bol'nitsy Bryanskoy oblasti (for Sverdlov).
3. Iz kafedry normal'noy anatomii II Moskovskogo meditsinskogo instituta (for Andreyev).
4. Iz kafedry obshchey khirurgii i kafedry rentgenologii Chelyabinskogo meditsinskogo instituta (for Genadinnik, Kuznetsov).
5. Iz kafedry propedevticheskoy terapii Ivanovskogo meditsinskogo instituta (for Nikolayeva, Silakova).
6. Iz Lovozer'skoy rayonnoy bol'nitsy Murmanskoy oblasti (for Shamlyan).
7. Iz kafedry hospital'noy terapii Bashkir'skogo meditsinskogo instituta i terapevticheskogo otdeleniye ~~8-oy~~ bol'nitsy (for

(Continued on next card)

GABOV, A.I., bul'dozerist

My experience in bulldozer work. Avt. dor. 18 no.3:13-14
My-Js '55. (MLRA 8:9)

(Bulldozers)

GABOV, G

I

BFP

.R93068

OBSHCHESTVENNO-POLITICHESKIYE I FILOSOFSKIYE VZGLYADY DEKABRISTOV. MOSKVA, IZD-
VO ZNANIYE, 1953.

38 P. (VSESoyuznoye OBSHCHESTVO PO RASPROSTRANENIYU POLITICHESKIKH I NAUCHNYKH
ZNANIY, 1953, SERIYA 2, NO. 12)

BIBLIOGRAPHICAL FOOTNOTES.

RUSSIA

ACC NR: AP7012430

SOURCE CODE: UR/0075/66/021/009/1107/1112

AUTHOR: Gabov, N. I.; Shafiyev, A. I. -- Shafiev, A. I.

ORG: Perm' State University im. A. M. Gor'kiy (Permskiy gosudarstvennyy universitet)

TITLE: Chromatographic separation on paper of alkylphosphates and alkylphosphites

SOURCE: Zhurnal analiticheskoy khimii, v. 21, no. 9, 1966, 1107-1112

TOPIC TAGS: paper chromatography, phosphoric acid, phosphorous acid

SUB CODE: 07

ABSTRACT: The authors investigated solvents with the best separatory capacity for paper chromatography of a mixture of alkyl esters of phosphoric and phosphorous acids, of the composition $ROPO_2H_2$, $(RO)_2POH$, $(RO)_3P$, $ROPO_3H_2$, $(RO)_2PO_2H$, and $(RO)_3PO$. In each individual case, one of the following radicals served as alkyl groups: CH_3 , C_2H_5 , $n-C_3H_7$, and $n-C_4H_9$. Instead of monoalkyl- and dialkylphosphoric acids and monoalkylphosphorous acids, the acid chloride were used, which hydrolysed with the water present in the solvent, into the corresponding acids. Orig. art. has: 3 tables. [JPRS: 40,422]

Card 1/1

UDC: 543.544
0932 1376

MUYZEMNEK, Yu.A.; GABOV, O.A.; YEGOROV, M.V.

Testing the model of a ball mill. Obog. rud 6 no.5:39-42 '61.
(MIRA 15:1)

1. Ural'skiy zavod tyazhelogo mashinostroyeniya imeni S.
Ordzhonikidze.

(Crushing machinery—Models)

MUYZEMNEK, Yu.A.; GABOV, O.A.

Crusher for coarse crushing. Gor. zhur no.4:54-57 Ap '63. (MIRA 16:4)

1. Ural'skiy zavod tyazhelogo mashinostroyeniya imeni Sergo Ordzhonikidze,
Sverdlovsk.

(Crushing machinery)

NOVAKOVSKIY, V.M.; GABOV, V.M.

Hydrogen overvoltage in presence of oxidizers. [Trudy]
UNIKHIM no.9:52-58 '61. (MIRA 15:12)
(Oxidation, Electrolytic)
(Hydrogen ion concentration)

GABOV, Yu.A.; SEREKH, V.I.; MIKHAYLOVA, Ye.K.

Hafnium in zirconiums from granitoids in the Zerena Massif. Izv.
AN Kazakh. SSR. Ser. geol. 22 no.4:65-68 JI-Ag '65. (MIRA 18:9)

1. Tsentral'no-Kazakhstanskoye geologicheskoye upravleniye, g.
Karaganda.

ROZENBLYUM, Yakov Shevel'yevich; MURAV'YEV, M.I., nauchnyy red.;
GABOVA, D.M., red.; SHVETSOV, S.V., tekhn. red.

[The SPR solo-stitching machine and the UPM angle-sewing machine]
Mashina SPR dlia pristrochki podoshv i ugloproshivaniia mashina
UPM. Moskva, Rostekhzdat, 1961. 181 p. (MIRA 15:6)
(Shoe machinery)

GORSKOV, Vladimir Alekseyevich; LYULYUKINA, V.F., retsenzent; ZINYUK, M.N., nauchnyy red.; GABOVA, D.M., red.; SHAPENKOVA, T.A., tekhn. red.

[Technical standards and the organization of work in glass production (high-quality glassware and glass containers)] Tekhnicheskoe normirovanie i organizatsiia truda v stekol'nom proizvodstve (sortovoi posudy i steklianoi tary). Izd.2., perer. i dop. Moskva, Izd-vo nauchno-tekhn. lit-ry RSFSR, 1961. 393 p.

(MIRA 14:9)

(Glassware—Production standards)

MARAKUSHEV, Yevgeniy Alekseyevich; OBLEZOV, Aleksandr Ivanovich;
SAFRANOVA, Irina Vasil'yevna; GABOVA, D.M., red.; KOGAN, V.V.,
tekh.n.red.

[PMZ class 202 sewing machine for stitching the sleeve into the
armhole] Mashina 202 klassa PMZ dlia vtachivaniia rukava v proimu.
Moskva, Gos.nauchno-tekh.n.izd-vo lit-ry po legkoi promyshl., 1959.
75 p. (MIRA 13:11)

(Sewing machines)

HOZOV, Abram Lazarevich; KARPEL', Esfir' Donovna; GENIN, Il'ya L'vovich;
LIPKOV, I.A., kand.tekhn.nauk, retsenzent; GABOVA, D.M., red.;
KYAKNIN, M.T., tekhn.red.

[Weft knit manufacture] Utochniazal'noe proizvodstvo. Moskva,
Gos.nauchno-tekhn.isd-vo lit-ry po legkoi promyshl., 1959. 109 p.
(MIRA 12:9)

(Knit goods industry)

FEDENYUK, Vasily Gavrilovich, kand.tekhn.nauk; SAVOSTITSKIY, A.V.,
retsensent; VORONIN, G.M., retsensent; GABOVA, D.M., red.;
KNAKNIH, M.T., tekhn.red.

[Methods for making glued seams in assembling clothing
sections] Metody klevogo soedineniia detalei shveinykh
izdelii. Izd.2., perer. i dop. Moskva, Gos.nauchno-tekhn.
izd-vo lit-ry po legkoi promyshl., 1959. 146 p.

(MIRA 13:5)

(Clothing industry)

(Glue)

MALYSHEVA, Nadezhda Ivanovna; BARYSHNIKOV, Aleksandr Vasil'yevich;
KOSENKOV, Nikolay Ivanovich; FOMIN, P.D., nauchnyy red. [deceased];
GABOVA, D.M., red.; MEDVEDEV, L.Ya., tekhn.red.; KNAKNIN, M.T.,
tekhn.red.

[Design and control of Cotton machines] Ustroistvo i regulirovanie
kottonnykh mashin. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po
legkoi promyshl., 1959. 221 p. (MIRA 12:12)
(Knitting machines)

POPKOV, Vasily Ivanovich, kand.tekhn.nauk; SERGIYEV, Vladimir Poliyenovich;
VORONIN, G.M., retsenzent; NIKITIN, V.M., retsenzent; GABOVA,
D.M., red.; KNAKNIN, M.T., tekhn.red.

[Work organization at garment factories] Organizatsiia proiz-
vodstva na shveinom predpriatii. Izd.2., perer. i dop. Moskva,
Izd-vo nauchno-tekhn.lit-ry, 1960. 202 p.

(MIRA 14:6)

(Clothing industry)

TRET'YAKOVA, Nina Yakovlevna. Prinimal uchastiye FODIMAN, L.V.
MODESTOVA, T.A., dotsent, kand.tekhn.nauk, retsenzent;
RUSAKOV, S.I., dotsent, kand.tekhn.nauk, nauchnyy red.;
GABOVA, D.M., red.; KNAKNIN, M.T., tekhn.red.

[Guide for textiles used in clothing manufacture (textile fibers;
mechanical and chemical data on fibrous materials)] Materialovede-
nie shveinogo proizvodstva. (Tekstil'nye volokna; kratkaia mekhaniki-
cheskaia i khimicheskaia tekhnologiya voloknistykh materialov).
Moskva, Izd-vo nauchno-tekhn.lit-ry RSPSR, 1960. 231 p.

(MIRA 13:11)

(Textile fibers)

(Clothing industry)

ABRAMOV, Sergey Aleksandrovich; GUSEV, V.P., retsenzent; GABOVA, D.M.,
red.; KUFTINA, R.K., tekhn. red.

[Equipment and technology for the steam setting of capron
hosiery]Oborudovanie i tekhnologija zaparivania kapronovykh
chulok. Moskva, Rostekhzdat, 1962. 140 p. (MIRA 16:1)
(Hosiery, Nylon) (Textile machinery)

SMIRNOV, Leonid Stepanovich; TRUKHAN, Gennadiy Lukich; VINCH,
Lidiya Vladimirovna; DUBININA, Ol'ga Alekseyevna; KOBLYAKOVA,
Ye. B., kand. tekhn. nauk, dots., retsenzent; GABOVA, D.M.,
red.; TRISHINA, L.A., tekhn. red.

[Pattern design for knit goods]Konstruirovaniye trikotashaykh.
izdelii. Moskva, Rostekhzdat, 1962. 187 p. (MIRA 16:3)
(Knit goods) (Dressmaking—Pattern design)

MIRKIN, Moisey Samuylovich; SIMIN, Solomon Khononovich; LIPKOV, I.A.,
kand. tekhn. nauk, retsenzent; KISLYUK, I.V., kand. tekhn.
nauk, retsenzent; GABOVA, D.M., red.; TRISHINA, L.A., tekhn.
red.

[Circular knitting machines for knitted outerwear]Kruglo-
viazal'nye mashiny verkhnego trikotazha. Moskva, Rostekh-
izdat, 1962. 307 p. (MIRA 15:10)
(Knitting machines)

KOZLOV, Vasilii Petrovich; OBLEZOV, Aleksandr Ivanovich; KOKETKIN,
Petr Petrovich; GABOVA, D.M., red.; BATYREVA, G.G., tekhn.
red.

[Semiautomatic PMZ Class 220 zigzag sewing machine for bar
tacks] Zakreporchnyi poluavtomat 220 klassa PMZ. Moskva,
Gizlegprom, 1963. 51 p. (MIRA 17:1)

KOGAN, Lav Peysakhovich; SIMIN, S.Kh., kand. tekhn. nauk, retsenzent;
GABOVA, D.M., red.; ZLOTAREVA, I.Z., tekhn. red.

[Circular knitting machine KT-1] Kruglotrikotazhnaia ma-
shina KT-1. Moskva, Gizlegprom. 1963. 87 p. (MIRA 16:7)
(Knitting machines)

POTEMKIN, Dmitriy Mikhaylovich; SHORIN, V.I., inzh., retsenzent;
GABOVA, D.M., red.; TRISHINA, L.A., tekhn. red.

[Development and improvement of warp-knitting machines]
Razvitie i usovershenstvovanie osnovovyazal'nykh mashin.
Moskva, Kostekhzdat, 1963. 98 p. (MIRA 16:6)
(Knitting machines)

TAZOVA, Nadezhda Afanas'yevna; GABOVA, D.M., red.; BATYREVA, G.G.,
tekh. red.

[Handwoven filet lace and filet guipure embroidery] Ruchnoe
fileinoe pletenie i fileino-gipiurnaia vyshivka. 2. izd.,
perer. i dop. Moskva, Gizlegprom, 1963. 158 p.

(MIRA 17:2)

SIMIN, Solomon Khonovich; MIRKIN, Moisey Samoylovich; STEL'BOYN,
P.S., retsenzent; GABOVA, D.M., red.; VINOGRADOVA, G.I.,
tekhn. red.

[Multisystem circular interlock knitting machines] Mnogo-
sistemnye krugloviazal'nye mashiny interlok. Moskva, Giz-
legprom, 1963. 268 p. (MIRA 17:1)

SAVVATEYEVA, Zinaida Vladimirovna. Prizimal uchastiye PLUNGYAN, T.M.,
kand. tekhn.nauk; FLEROVA, L.N., kand. tekhn. nauk,
retsenzent; GOL'DBERG, N.V., prep. tekhnikuma, retsenzent;
TIMONINA, Ye.P., prep. tekhnikuma, retsenzent; GABOVA, D.M.,
red.; BATYREVA, G.G., tekhn. red.

[Technology of the manufacture of knit clothing] Tekhnologiya
trikotazhno-shveinogo proizvodstva. Moskva, Gizepgrom,
1963. 430 p. (MIRA 16:9)

1. Ivantsevskiy trikotazhnyy tekhnikum (for Flerova).
(Knit goods industry)

PLUNGAN, Mariyana Markovna; ZNAMENSKIY, A.K., red.; GABOVA,
D.M., red.

[Conveyorization of operations in knit goods manufacture]
Konvekerizatsiia protsessov v trikotazhnom proizvodstve.
Moskva, Legkaya Industriya, 1964. 149 p. (MIRA 17:9)

GALANINA, Ol'ga Dmitriyevna; KATSENELENOGEN, Abram Moiseyevich;
ROMANOVA, L.A., retsenzent; LYAKHOVETS, M.S., retsenzent;
GABOVA, D.M., red.

[Working principles, operation and maintenance of warp-
knitting machines] Ustroistvo, rabota i obsluzhivanie os-
novoviazal'nykh mashin. Moskva, "Legkaia industriia,"
1954. 276 p. (MIRA 17:10)

KOLESNIKOV, Petr Alekseyevich; IZMEST'YEVA, A.Ya., retsenzent;
GABOVA, D.M., red.

[Heat insulating properties of clothing] Teplozashchitnye
svoistva odezhdy. Moskva, Legkaia industriia, 1965. 345 p.
(MIRA 18:4)

BAZHENOV, Vladimir Ivanovich; KOBILYANSKIY, D.A., retsenzent;
RYZHIKOVA, A.M., retsenzent; BELOKOSKOVA, N.A.,
retsenzent; MINEYEVA, V.I., retsenzent; POD'YEMSHCHIKOVA,
K.K., retsenzent; GABOVA, D.M., red.

[Study of materials used in the clothing industry] Mate-
rialovedenie shveinogo proizvodstva. Moskva, Legkaiia in-
dustriia, 1964. 374 p. (MIRA 18:4)

IOFFE, Iosif Grigor'yevich; MEDVEDEV, M.F., retsenzent; ZUBAREVA,
M.I., retsenzent; GABOVA, D.M., red.

[Organization and planning of knit goods production] Orga-
nizatsiia i planirovanie trikotazhnogo (viazal'nogo) proiz-
vodstva. Moskva, Legkaia industriia, 1965. 237 p.
(MIRA 18:5)

SINYAKOV, Aleksandr Borisovich; ANTIPOVA, Anisiya Ivanovna;
KARASEVA, Nina Nikolayevna; AVER'YANOVA, T.N., inzh.,
retsenzent; VIDANOVA, R.I., prepodav., retsenzent;
GUR'YANOVA, N.I., prepodav., retsenzent; DATNER, M.G.,
inzh., retsenzent; KARASEV, V.K., kand. tekhn. nauk,
nauchn. red.; GABOVA, D.M., red.

[Technology of clothing manufacture] Tekhnologiya shvei-
nogo proizvodstva. Moskva, Legkaya industriia, 1965. 409 p.
(MIRA 18:7)

GOL'DANSKIY, Vyacheslav Iosifovich; ASTAKHOVA, Valentina Grigor'yevna,
zhurnalist; GABOVA, K.K., red.

[Miracles of transmutation] Chude-ra prevrashchenii. Mo-
skva, Znanie, 1964. 31 p. (Novoe v zhizni, nauke, tekhnike. XII Seriya: Estestvoznaniye i religiya, no.9)
(MIRA 17:11)

1. Chlen-korrespondent AN SSSR (for Gol'danskiy).

NEGOVSKIY, Vladimir Aleksandrovich, laureat Gosudarstvennoy premii
prof.; GABOVA, K.K., red.

[From death to life] Ot smerti k zhizni. Moskva, izd-vo
"Znanie," 1964. 39 p. (Novoe v zhizni, nauke, tekhnike.
XII Seriya: Estestvoznaniye i religiya, no.4)
(MIRA 17:6)

ТРЕФИЛОВ, Борис Александрович, канд. биол. наук; ГАЙОВА, К.К.,
red.

[Bones of a dragon] Kosti drakona. Moskva, Izd-vo "Znanie"
1964. 45 p. (No 06 v zhizni, nauke, tekhnike. XII Seriya:
Estestvoznaniye i religiya, no.5) (SIRA 17:6)

GABOVA, K.K., red.

[Science penetrates into the unknown] Nauka vtorgaetsia v
neizvedannoe. Moskva, Izd-vo "Znanie," 1964. 47 p. (Novoe
v zhizni, nauke, tekhnike. XII Seriya: Estestvoznaniie i re-
ligiia, no.2) (MIRA 17:6)

AKIMUSHKIN, Igor' Ivanovich; GABOVA, K.K., red.

[Discovery of the "sixth sense"] Otkrytie "shestogo
chuvstva." Moskva, Izd-vo "Znanie," 1964. 55 p.
(Novoe v zhizni, nauke, tekhnike. XII Seria:
Estestvoznaniie i religia, no.1) (MIRA 17:6)

GABOVA, K.K., red.

[Chemistry and the secrets of life] Khimie i taing
zhizni; sbornik statei. Moskva, Izd-vo "Znanie," 1964.
40 p. (Novoe v zhizni, nauke, tekhnike. XII Seriya:
Estestvoznaniye i religiya, no.12) (MIRA 18:2)

MEERING, Tat'yana Aleksandrovna; GABOVA, K.K., red.

[The brain and psychology] Mozg i psikhika. Moskva, Izd-vo "Znanie," 1965. 45 p. (Novoe v zhizni, nauke, tekhnike. XII Seria: Estestvoznaniye i religiya, no.4)

(MIRA 18:4)

KUNYANTS, Ivan Iyudvigovich, akademik; ASTAKHOVA, Valentina
Grigor'yevna; GABOVA, K.K., red.

[Challenge to a great secret] Vyzov velikoi taine. Mo-
skva, Izd-vo "Znanie," 1965. 47 p. (Novoe v zhizni,
nauke, tekhnike. XII Seriya: Estestvoznaniye i religiya,
no.5) (MIRA 18:5)

NESTRUKH, Mikhail Fedorovich, doktor biol. nauk; POZHARITSKAYA,
Natal'ya Mikhaylevna; GABOVA, K.K., red.

[From the higher animals to man] Ot vysshikh zivotnykh
k cheloveku. Moskva, Izd-vo "Znanie," 1965. 47 p. (No-
voe v zhizni, nauke, tekhnike. XII Seriya: Estestvoznanie
i religii, no.7) (MIRA 18:7)

The Effect of Environment in the Extreme North on Newborn Infants.

M. V. Gabova. (Pediatriya) 46-47, No. 3, May-June, 1954.

Observations were made at a settlement in the extreme north of Russia on 365 newborn infants (181 males and 184 females) to determine whether the climatic conditions and the diet of the mother, consisting largely of tinned foods, affected the development of the foetus or of the child up to 6 months of age. In the [unidentified] area of the settlement winter lasts for about 8 to 9 months, and strong, biting winds and temperatures of -50°C . are common. The pregnant women lived in wooden houses and had an abundance of tinned foods, supplemented at certain seasons by fresh foods such as reindeer meat, fish, potatoes, and berries. Vitamins were provided in dragee form daily.

The following were among the most interesting findings. (1) When the mother had been in the extreme north for less than one year the average birth weight was 224 to 246 g. lower than under normal conditions. (2) The average birth weight of children whose mothers had been in the extreme north for 2 to 3 years was 3,444 g. for boys and 3,380 g. for girls, these figures being higher than those for children born of indigenous mothers by 101 g. and 127 g. respectively. (3) The average birth weight of children whose mothers had been in the extreme north for 4 years or more was 3,780 g. for boys and 3,500 g. for girls, exceeding figures for children born in the more temperate region of the Urals by 437 g. and 242 g. respectively. (4) The number of premature births was slightly below the average, and in almost every case the mother had been in the extreme north for less than 12 months. (5) Of 75 infants born to mothers who had been in the north for 4 years or more, none died during the first 6 months of life, and of those born to mothers who had been resident 2 to 3 years, only 1.3% died - a lower mortality than the average.

Edward D. Fox

SO: ABSTRACTS OF WORLD MEDICINE, Vol. 16 No. 6

STREZHNEV, I.V.; MORGUNOVA, E.M.; GABOVA, Ye.L.

Study of the synthesis of calcium hypophosphite solutions.
Zhur. prikl. khim. 36 no.5:953-963 My '63. (MIRA 16:8)

1. Ural'skiy nauchno-issledovatel'skiy khimicheskiy institut.
(Calcium hypophosphite)

STREZHNEV, I.V.; MORGUNOVA, E.M.; GABOVA, Ye.L.

Production of sodium hypophosphite from yellow phosphorus
and caustic soda in the presence of barium hydroxide. Zhur.
prikl. khim. 36 no.9:1873-1882 D. '63. (MIRA 17:1)

GAEVOVA, Ye.N.

Observations on bloodsucking insects and their daily activity in
the Komi A.S.S.R. Trudy Komi fil. AN SSSR no.9:92-95 '60.
(MIRA 15:1)

(KOMI A.S.S.R.—DIPTERA)
(INSECTS, INJURIOUS AND BENEFICIAL)

GABOVA, Ye.N.

The anopheles in the vicinity of the city of Syktyvkar. Izv.
Komi. fil. Geog. ob-va SSSR no.8:84-87 '63. (MIRA 17:6)

MARTYNEKO, Vera Antonovna; GABOVA, Z., red.

[Medicinal plants of the Komi A.S.S.R.] Lekarstvennye rasten-
niia Komi ASSR. Syktyvkar, Komi knizhnoe izd-vo, 1964. 42 p.
(MIRA 18:4)

GABOVCHIK, PETR

Name: GABOVCHIK, PETR

Dissertation: Investigation of phenomena in the output resonator gap of a klystron

Degree: Cand Tech Sci

DEFENDED AT
AFFILIATION:

Min Higher Education, Leningrad Electrotechnical Inst imeni V. I. Ul'yanov (Lenin)

PUBLICATION

~~Date~~ Date, Place: 1956, Leningrad

Source: Knizhnaya Letopis', No 4, 1957

GABOVICH, A. A.

GABOVICH, A. A. -- "The Experimental Verification of the Basic Equations of Current in Oscillographic Polarography." Min Higher Education USSR. Moscow Order of Lenin State U imeni M. V. Lomonosov. Chemistry Faculty. Moscow, 1955. (Dissertation for the Degree of Candidate in Chemical Sciences)

SO: Knizhnaya Letopis', No 1, 1956, pp 102-122, 124

Gabovich, A.A.

Category: USSR/Fitting Out of Laboratories. Instruments, Their Theory, H.
Construction and Use.

Abs Jour: Referat Zhur-Khimiya, No 9, 1957, 31171

Author : Gabovich A. A.
Inst : Kishinev Agricultural Institute
Title : Pulsed Oscillographic Polarograph with Trigonal Voltage Scanning
and Its Utilization.

Orig Pub: Tr. Kishinevsk. s.-kh. in-ta, 1956, 9, 143-172

Abstract: The polarograph can be utilized for qualitative and quantitative analysis of solutions of up to 10^{-5} M, and for the study of kinetics of electrode processes. Direct proportionality has been ascertained between magnitude of maximum current and concentration of solution undergoing reduction, in the case of millimolar concentrations of ions: Tl, Cd, Cu, Pb, Fe, Zn, Co, Ni, Cr.

Card : 1/1

-25-

GABOVICH, A.A.

AUTHORS: Gabovich, A.A., and Samus', I.D.

3-58-2-18/33

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R000513920016-4

TITLE: An Apparatus for Laboratory Work in Acoustics (Ustanovka dlya laboratornykh zanyatiy po akustike)

PERIODICAL: Vestnik Vysshey Shkoly, 1958, #2, pp. 71-72 (USSR)

ABSTRACT: The kafedra fiziki (Chair of Physics of the Kishinev Agricultural Institute) has designed an apparatus for exercises in acoustics at the Mechanization Faculty. The device consists of a sound generator ZG-10 with a telephone as a source of sound and a piezo-electrical microphone with the electronic oscillograph EO-7 as an indicator of antinodes and nodes.

The sound generator conveys to the telephone a certain current of the audio frequency. The measuring of the length of a standing and a running wave is made by taking the difference of 2 readings on the small table.

The device can also be successfully used for lecture demonstrations with standing sound waves.

There is 1 photo and 2 Soviet references.

ASSOCIATION: Kishinevskiy sel'skokhozyaystvennyy institut imeni M.V.Frunze (Kishinev Agricultural Institute im.M.V.Frunze)

AVAILABLE: Library of Congress

Card 1/1

AUTHOR: Gabovich, A.A. 3-8-16/34
TITLE: New Equipment for Practical Training in Electricity in the Study of Physics (Novaya apparatura v fizicheskom praktikume po elektrichestvu)
PERIODICAL: Vestnik Vysshey Shkoly, 1957, # 8, pp 69-71 (USSR)
ABSTRACT: During recent years the Chair of Physics of the Kishinev Agricultural Institute has developed its own methods for conducting practical training in electricity at the Faculty of Mechanization. A number of devices has been manufactured with students' assistance enabling better utilization of new equipment and measuring apparatus. Special attention was paid to bridge, potentiometric and magnetic measurements, electronic devices, oscillations and waves. The section of bridge measuring is, in practical training, represented by d.c. bridges for small and medium resistances, and also by a.c. bridges for measuring the resistance of electrolytes, capacitances and inductances. The article deals with the bridges of Thomson, Kohlrausch, Soty and Maxwell, and indicates how they are assembled.

Card 1/2

3-8-16/34

New Equipment for Practical Training in Electricity in the Study of Physics

It describes the work in potentiometric and magnetic measuring, and the application of electronic devices as well as the study of the kenotron rectifier. The section in oscillations and waves includes training in ascertaining electromagnetic waves, studying the principles of radio communication electronic oscillographs and the assembly of radio receivers.

The study of radiocommunication is not carried out with the complicated factory sets as recommended in K.P.Yakovlev's book "Practical Training in Physics" but by means of a specially constructed device (Figure 1).

The study of electronic oscillographs is also conducted on a special training device without amplifiers, (Figure 2).

The article contains 2 figures and 1 Russian reference.

ASSOCIATION: The Kishinev Agricultural Institute imeni M.V.Frunze
(Kishinevskiy sel'skokhozyaystvennyy institut imeni M.V.Frunze)

AVAILABLE: Library of Congress

Card 2/2

GABOVICH, A.A., kand.khim.nauk

Quantitative oscillographic polarography of copper, lead, zinc, and
manganese ions. Trudy Kish.sel'khoz.inst. 26:103-116 '62.
(MIRA 16:5)

(Metals--Analysis) (Polarography)

GABOVICH, A.A., kand.khim.nauk

Oscillographic reversibility of manganese, zinc, cobalt, nickel,
and chromium ions. Trudy Kish.sel'khozinst. 26:117-121 '62.
(MIRA 16:5)

(Metals--Analysis) (Polarography)

GABOVICH, A.A., kand.khim.nauk; EDIGER, V.G.

Oscillographic polarograph with a single and multiple saw-toothed
voltage sweep. Trudy Kish.sel'khoz.inst. 26:123-133 '62.
(MIRA 16:5)

(Polarograph)

GABOVICH, A.M.

Category: USSR / Physical Chemistry - Electrochemistry

R-12

Abs Jour: Referat Zhur-Khimiya, No 9, 1957, 30147

Author : Gabovich A. M.

Inst : Kishinev Agricultural Institute

Titl. : Concerning the Effect of Some Surface-Active Substances on Current Peaks in Oscillographic Polarography. Communication 2.

Orig Pub: Tr. Kishinevsk. s.-kh. in-ta, 1956, 9, 173-176

Abstract: Height of the peak of Cd^{2+} ($6 \cdot 10^{-4}$ M) with a background of 1 M KCl decreases with increase of concentration of surface active substance (SAS) $n\text{-C}_3\text{H}_7\text{OH}$ (I), $n\text{-C}_4\text{H}_9\text{CH}$ (II), $n\text{-C}_5\text{H}_{11}\text{OH}$ (III). Peak inhibition increases with increase of molecular weight of SAS. With a $14.43 \cdot 10^{-2}$ M concentration of II, or $8.67 \cdot 10^{-2}$ M concentration of III, the peak is inhibited completely and the oscillogram becomes of the form of a conventional polarographic wave. With equal concentrations of II and III the peak is inhibited about three times as much by an addition of III than by the addition of II; this indicates that the rate of SAS feed that induces peak inhibition is determined by the process of adsorption - desorption of SAS and not by diffusion of the latter.

Card : 1/1

-15-

GABOVICH, A.M.

APPROVED FOR RELEASE: 03/13/2001

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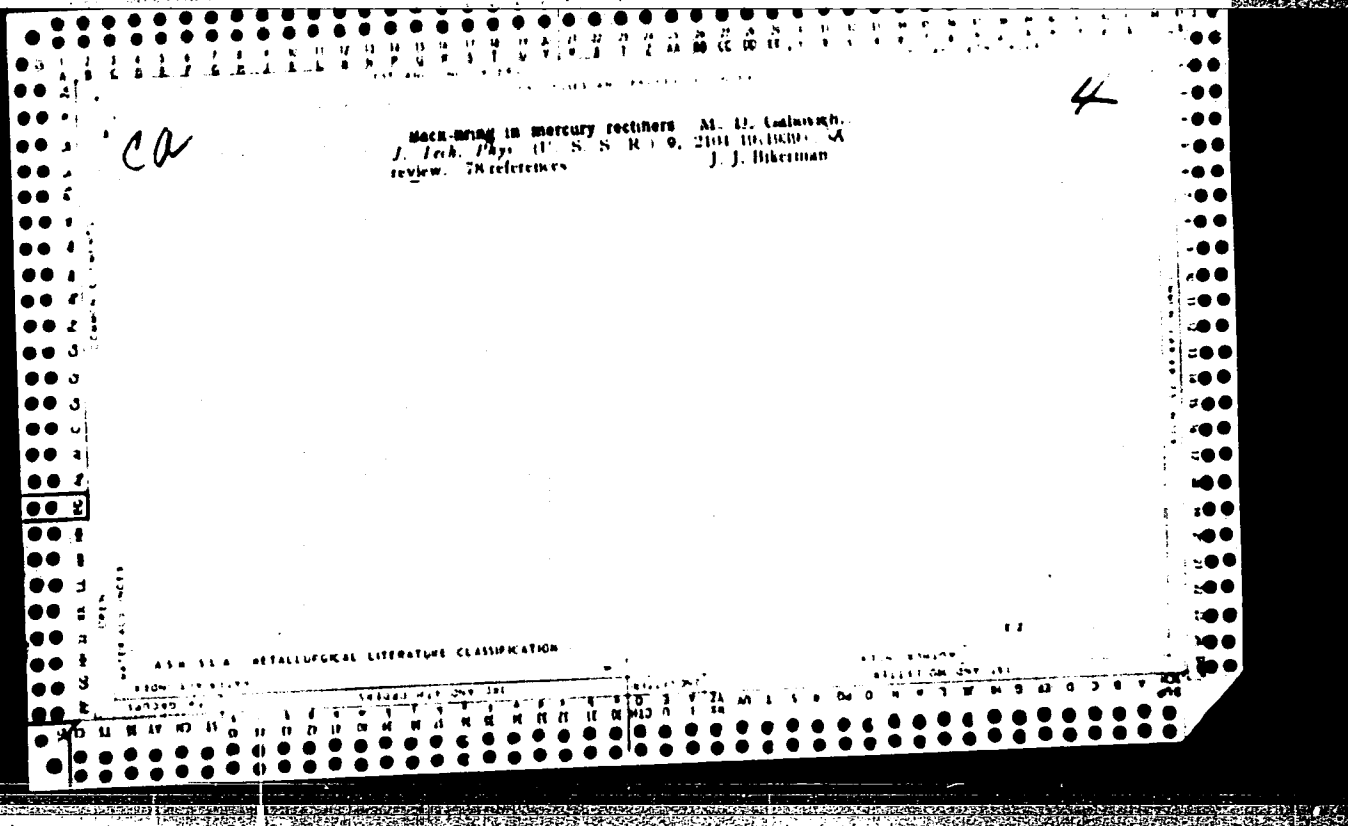
Problem of amperometric titration by means of an oscillographic polarograph. Trudy Kish.sel'khoz.inst. 26:89-94 '62. (MIRA 16:5)
(Polarography) (Conductometric analysis)

GABOVICH, I.A.

Characteristics of the formation and distribution of
underground waters in the northeastern area of the European
part of the U.S.S.R. Mat. po geol. i pol. iskop.
Sev.-Vost. Evrop. chasti SSSR. no.2:74-81 '62. (MIRA 15:11)
(Russia, Northern—Water, Underground)

BC

Some processes at discharge ignition in the
gasotron. N. D. MONOULIS and M. D. GABOVITICH
(Bull. Acad. Sci. U.R.S.S., 1938, Ser. Phys., 504-509).
—The effects of feeding tension, pressure, and wall
effects on the discharge potential of Hg gasotrons at
high voltages have been examined. The ignition
peak is found only where a negative charge can
accumulate on the walls, and the peak diminishes with
increasing pressure. L. J. J.



GABOVICH, M. D.

PA-26T95

USSR/Physics

Dec 1946

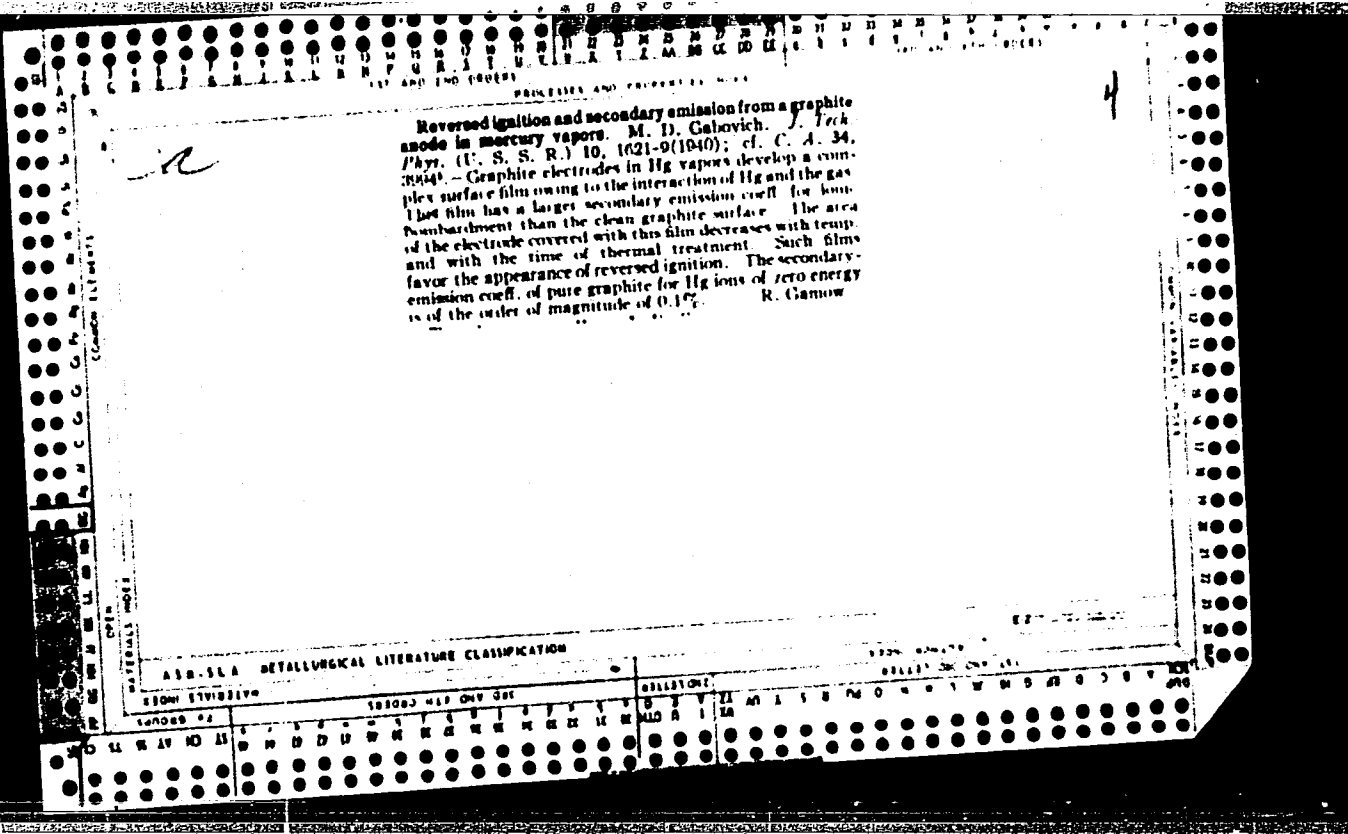
Electrons - Emission
Cathodes, Oxide

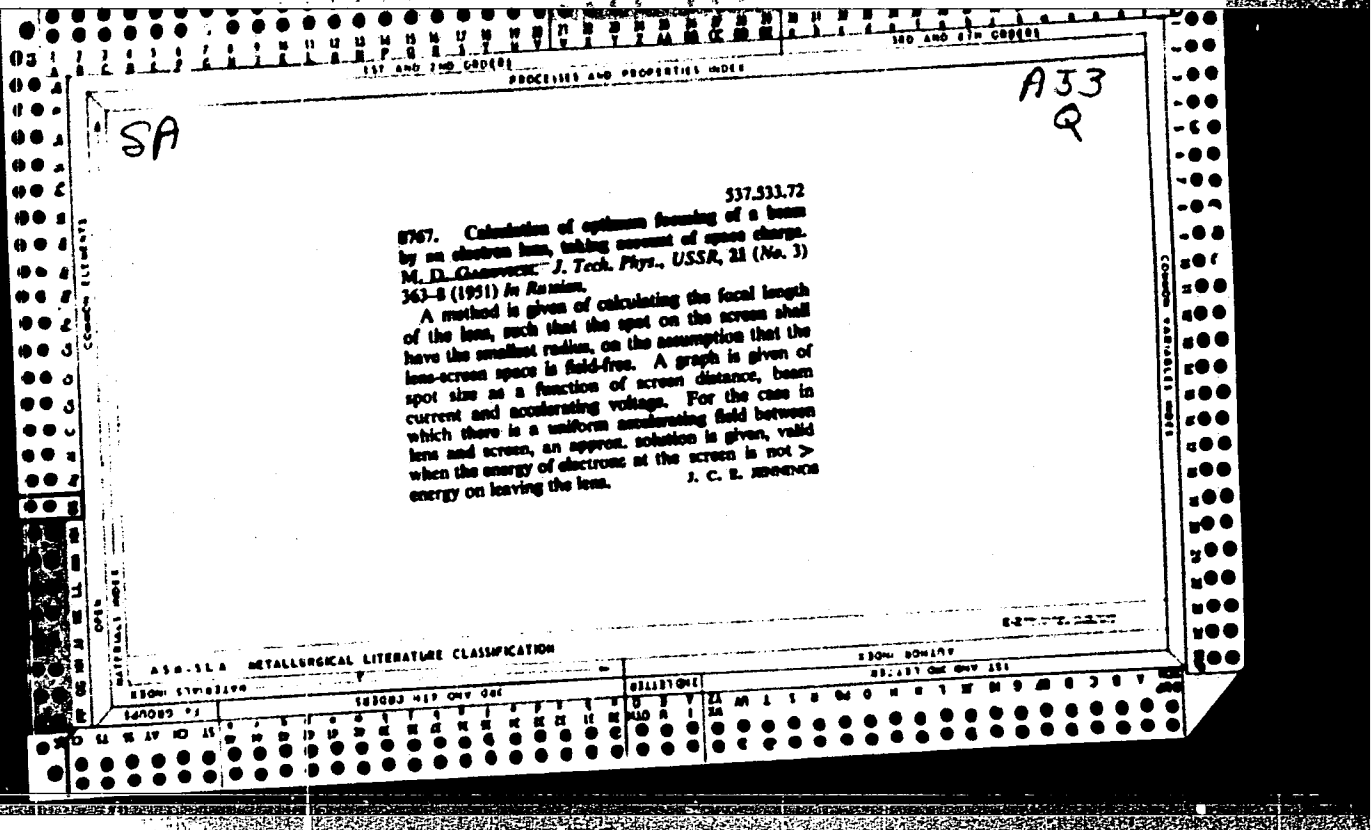
"Electron Emissions of an Oxide Thermocathode in an Impulse System," N. D. Morgulis, M. D. Gabovich, 4 pp

"Zhur Tekh Fiz" Vol XVI, No 10

This article discusses some experimental data characteristic of electron emissions and effect. Shot effect for oxide thermocathodes during excitation of the tested tubes appeared as charge impulses of short duration. Submitted at the Kiev Branch of the Institute of Physics, Academy of Sciences of the USSR.

PA-26T95





FD-3184

GABOVICH, M. D.

USSR/Physics - Charged Particles

Card 1/1 Pub. 153-14/21

Author : Gabovich, M. D.

Title : On some rules of spreading of intensive beams of charged particles

Periodical: Zhur. tekh. fiz., 25, No 8 (August), 1955, 1458-1461

Abstract : It is known that the spreading of a beam of circular cross section under the action of a space charge differs from the spreading of a beam of rectangular cross section. The author investigates one previously undiscussed difference and derives formulas for the current density limit in beams arising as a consequence of the spreading effect. He restricts the discussion to beams which are much longer than their radii, and whose particles have a velocity much less than that of light.

Submitted : January 22, 1955

100,000 H. M. D.

100,000

IC19 ARC-tr-2312
THE EFFECT OF VOLUME CHARGES DURING THE DIFFUSION OF INTENSE BEAMS OF CHARGED PARTICLES.
M. D. Gabovich. Translated from Uspekhi Fiz. Nauk 58, 218 (1971) 63p.

Results of published reports dealing with the influence of the volume charge on the diffusion of intense beams of charged particles are reviewed and collected for the purpose of indicating phases which require additional experimentation and stricter theory. The diffusion of beams under the effect of their own volume charge, means of intense beam formation, restriction of currents in beams and volume charge neutralization by oppositely charged particles are considered. Mathematical equations for particle motion, beam structure and focusing, and diffusion behavior are given. (D.E.B.)

100,000

GABOVICH, M D

USSR/Nuclear Physics - Installations and Instruments.
Methods of Measurement and Research.

C-2

Abs Jour : Ref Zhur - Fizika, No 4, 1957, 8520

Author : Gabovich, M.D., Fedorue, Z.P.

Inst :

Title : Source of Protons with Thermal Dissociation of Hydrogen Molecules.

Orig Pub : Ukr. fiz. zh., 1956, 1, No 2, 158-169.

Abstract : It is shown that it is possible to increase considerably the yield of atomic ions (up to 85%) in ionic sources by using the thermal dissociation of H_2 in the discharge chamber of the source. In the source developed in this investigation, the discharge takes place in a metal chamber heated to $2500^\circ K$ and results from the energy liberated during the discharge process. It is shown that increasing the yield of atomic ions causes the thermal dissociation of the H_2 molecules.

Card 1/1

inst. fiziki Akad. nauk URSR.

USSR/Nuclear Physics - Instruments and Installations
Methods of Measurement and Investigation.

C-2

Abs Jour : Referat Zhur - Fizika, No 1, 1958, 257

Author : Gabovich, M.D.

Inst : Institute of Physics, Academy of Sciences, Ukrainian SSR.

Title : Mass Analyzer for Continuous Observation of the Composition of an Ion Beam.

Orig Pub : Probory i dekh. eksperimenta, 1956, No 2, 88-89

Abstract : Description of a practically inertia-less mass analyzer, which permits continuous observation of the composition of an ion beam. The instrument employs the method of selection by masses, known under the name of "the method of compensated fields." Out of a beam of ions, leaving the ion source in a space with crossed electric and magnetic fields, the only ions that can reach the collector

Card 1/2

GABOVICH, M.D.

"Probe Measurements of Parameters of a Plasma Located in a Magnetic Field," by M. D. Gabovich, Tr. In-ta Fiziki AN UkSSR, (Works of the Institute of Physics of the Academy of Sciences UkSSR) 1956, No 7, pp 44-49 (from Referativnyy Zhurnal -- Fizika, No 10, Oct 56, Abstract No 29196) ✓

"Experimental results with a ferromagnetic probe (steel ball of 2 mm diameter) are described. The tests were made to find the causes of distortion of probe characteristics in a magnetic field. Measurements were made with a cold probe and with a probe at a temperature above the Curie point. At various orders of discharge in a magnetic field up to 500 oersted the ion parts of probe characteristics coincide in the magnetic and nonmagnetic states, while the electronic ones differ, but always by less than twice. The relative difference in electronic currents of saturation passes through a maximum with the rising discharge current. The author suggests that with magnetic fields used in the experiments the causes of distortion are connected to the so called d-effect. However, this effect is not sufficient to explain the distortions."

SUM. 1287

GABOVICH, M. D.

200-1-1116

ZHURNAL TEKHNIЧЕСКОИ ФИЗИКИ

Journal of Technical Physics

Vol XXVI, No. 5, May, 1956 (p 996-1003).

Handwritten scribbles

GABOVICH, M. D.,

KUCHERENKO, E. I. :

Penetrating Plasma and its Relation With the Primary Focussing of the Ionic Beam

D

The parameters are determined of a plasma^{in vac} which penetrates through an exit hole of a proton source for a discharge in hydrogen and also the spatial distribution of the individual parameters. In another paper (which is in the process of publication) the penetrating plasma is investigated for a discharge in mercury vapours under favorable metering conditions; it is shown in that paper that the potential gradient may reach very high values of about 50 V/cm. A sketch of the ion source used in the here described tests is shown in Fig. 1, p. 997. The volt-ampere characteristics observed on drawing away the ionic beam from the source is explained by a change in the collimation of the penetrating plasma. The authors point out that the statement by Kistemaker

1/2 RMT

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Penetrating Plasma and its Relation With the Primary Focussing of the Ionic Beam

and Douwes Dekker (Fisica 16, 198, 1950) of the drawn ionic current being limited by the space charge is not at all substantiated.

AW 2/2
RMJ
JH

GABOVICH, M.D.; YERMOLOVICH, Yu.B.

On the radial distribution of the concentration of charged particles
in a magnetic ion source. Ukr. fiz. zhur. 2 no.2:165-174 Ap-Je '57.
(MIRA 10:6)

1. Institut fiziki Akademii nauk URSR.
(Ion beams) (Magnetic fields)

Penetrating plasma and its connection to the solar wind

"APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000513920016-4

JR
MT

APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000513920016-4"

AUTHOR: GABOVICH, M.D., KUCHERENKOV, S.T. PA - 2126
TITLE: Investigation of the penetrating plasma on the occasion of a discharge in mercury vapors (Isslyedovaniye pronikayushchey plazmy pri razryade v rtutnykh parakh. Russian).
PERIODICAL: Zhurnal Tekhn. fiz., 1957, Vol 27, Nr 2, pp 299 - 308 (U.S.S.R.)
Received: 3 / 1957 Reviewed: 4 / 1957
ABSTRACT: On the occasion of the forming of an ion bundle the source of which is a discharge plasm there is a transition domain in which transition from the chaotic motion of ions to a directioned motion takes place. It was the task of this paper to investigate this transition domain, attention being confined solely to the discharge in mercury vapors. At first the device is described with the aid of which experiments were carried out. An illustration of this device is attached. Preliminary experiments, which were carried out with the help of another device, showed that when shifting the probe from the domain in which the discharge occurs into the domain to be investigated, the characteristics of the probe retain their normal aspect. These characteristics are shown in form of a diagram. A further diagram shows the axial distribution of the characteristics of the plasmas obtained if the negative potential is lacking. An approximated equation for this distribution is given. The following diagrams show an analogous distribution of characteristics for the discharge current of 90 A/cm^2

Card 1/3

PA - 2126

Investigation of the penetrating plasma on the occasion of a discharge in mercury vapors.

and the spatial distribution of the characteristics of the penetrating plasma for a discharge current of 20 A/cm² and 90 A/cm². Furthermore, the influence exercised by the field on the configuration and extent of the penetrating plasmas was investigated. Experiments were carried out while at the same time the electric and magnetic fields exercised their influence. It was found that the temperature of the electron gas in the penetrating plasma diminishes considerably with a growing distance from the output opening. The gradient of the potential within the domain of the penetrating plasma is considerably higher (by several volts per cm) than in the discharge itself and it is directioned in such a manner that the ions are accelerated. The chaotic wall-flow of the ions emerging through the outlet opening is subjected to the influence of a highly accelerated field and is transformed into a flow with a predominant direction. From an equation derived it may be seen that the minimum amount of the potential within range of the outlet opening corresponds to the amount of the energy which the ions have in the transition zone near the negative probe. As long as the boundary of the penetrating plasma does not advance into the depth of the discharge, the entire ion flux passing through the opening is

Card 2/3