GAPLEVSKAYA, L.

Contribution of forecasters. Zashch. rast. ot vred. i bol. 10 no.6: 38-39 '65. (MIRA 18:7)

1. Zaveduyushchaya Tadzhikskim respublikanskim sektorom sluzhby signalizatsii i prognozov, Dushanbe.

Gaplevskaya, L. N.

USSR / General and Specialized Zoology - Insects 0-7

Abs Jour : Ref Zhur - Biol., No 6, March 1957, No 23234

Author : Stativkin, V.G., Gaplevskaya, L.N.

Inst : Not Given

Title : Prophylactic Measures in Controlling Pests and Cotton Plant Diseases.

Orig Pub : S. kh. Tadzhikistana, 1956, No 5, 52-54

Abstract : Mites, lice and summer cutworm moths develop on weeds before infesting cotton planting, and from them the cotton cutworm moths find additional nutrients. It is necessary to treat the weeds on the boundaries and sides of irrigating water with sodium arsenate, mineral oil emulsion or albikhtol pasts; the first time after mites and lice emerge from wintering, a second time when buds open on mulberry trees, and the third time at the beginning of cotton vegetation. It is useful also to spray trees around the cotton plots. The treatment of cotton plants should be begun even in single cases of infection by mites and

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USSR / General and Specialized Zoology - Insects 0-7

Abs Jour : Ref Zhur - Biol., No 6, March 1957, No 23234

plant lice. A prophylactic measure is the dusting of seeds before sowing by BHC against summer cutworm moth, treatment of seeds by a mordant against hommosis, and timely harvesting of Asiatic cotton on fields.

Card : 2/2

GAPLICHUK, O. (Kiev)

Television relay station in Vinnitsa. Radio no.2:24 F '55.
(Vinnitsa--Television stations) (MLRA 8:3)

GAPLICHUK, O.

In the Ukrainian division of the A.S.Popov All-Union Scientific Society of Radio and Electrical Engineering. Radio no.7:36 Jl' 55. (MLRA 8:10)

(Kiev--Radio--Congresses)

GAPLICHUK, O.

107-57-6-24/57

AUTHOR: Gaplichuk, O. (Kiyev)

TITLE: A Conference on Automation of Radio-Communication and Radio-Broadcasting Equipment (Konferentsiya po avtomatizatsii sredstv radiosvyazi i radioveshchaniya)

PERIODICAL: Radio, 1957, Nr 6, p 22 (USSR)

ABSTRACT: The Ukrainian Directorate of NTORiE imeni C. A. Popov and the Kiyevskaya direktsiya radiosvyazi i radioveshchaniya (DRSiV) (Kiyev Directorate of Radio Communications and Radio Broadcasting) have organized a scientific and engineering conference devoted to the problems of automation of radio broadcasting and radio communication means. Inventors of Ukraine and Belorussia, engineers, technicians, scientific workers, representatives of the Ministries of Communications of USSR and UkrSSR, etc., took part in the conference. I. Kirichenko, Minister of Communications of the UkrSSR, delivered a report on fundamental problems in the field. G. Fedunin, a representative of the Technical Division of the Ministry of Communications, USSR, delivered a report on the aims of automation and requirements of the automatic equipment. P. Karavayev, of the Kuybyshevskoye otdeleniye Nauchno-issledovatel'skogo instituta Ministerstva svyazi (the Kuybyshev branch of the

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A Conference on Automation of Radio-Communication and Radio-Broadcasting ....

Scientific and Research Institute of the Ministry of Communications), reported on various systems of automation of shortwave transmitters and on various automatic frequency-control systems. I. Seleznev, a representative of the same institute, delivered two reports: (1) on economical operation of radio broadcast stations, and (2) on thyratron-type remote-control systems. In all, there were twelve reports delivered. It was noted in the decisions of the Conference that the introduction of automation was inadequate and that the automation of equipment already in operation should be conducted by operating organizations themselves.

AVAILABLE: Library of Congress

Card 2/2

IVANOV, N.I.; GAPLICHUK, O.M.

Scientific and technical conference on problems of automatic control and long-distance servicing of intercity communication lines. Vest. sviazi 17 no.1:15 Ja '57. (MLRA 10:2)

1. Nachal'nik Kiyevskogo oblastnogo upravleniya svyazi, predsedatel' Ukrainskogo respublikanskogo pravleniya Nauchno-technicheskogo obshchestva radiotekhniki i elektrosvyazi imeni A.S.Popova (for Ivanov).
2. Zamestitel' predsedatelya pravleniya (for Gaplichuk).
(Kiev--Telecommunication--Congresses)

6(6)

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 1, p 269 (USSR) SOV/112-59-1-1881

AUTHOR: Gaplichuk, O. M.

TITLE: Conference on Problems in the Development of TV

PERIODICAL: Izv. vyssh. uchebn. zavedeniy. Radiotekhnika, 1958, Nr 2, pp 264-266

ABSTRACT: A summary of the reports delivered at a Conference held in Kiyev, November 19-22, 1957.

Card 1/1

SOV/142-58-4-30/30

AUTHOR: Gaplichuk, O.M., Engineer

TITLE: Conference to Commemorate the Founding of the V.I.Lenin Radio Laboratory in Nizhniy Novgorod (Konferentsiya posvyashchennaya pamyati nizhegorodskoy radiolaboratorii imeni V.I.Lenina)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy - Radiotekhnika, 1958, Nr 4, pp 521-524 (USSR)

ABSTRACT: On May 22, 1958, a conference began in Gor'kiy to mark the 40 years anniversary of the founding of the V.I. Lenin Laboratory in Nizhniy Novgorod. Participants, who numbered over 400, included V.A.Volkova, Secretary of the Party Gorkom in Kalinin, and V.Ye.Skvortsov, Area Chairman for Communications in Kalinin. Speakers such as V.M.Leshchinskiy spoke on developments in Soviet radio engineering, and particularly on the radio laboratory in Nizhniy Novgorod. L.A.Kopytin spoke on "The development of radio-engineering, radio and television"; Professors B.A.Ostroumov and A.A.

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SOV/142-58-4-30/30

Conference to Commemorate the Founding of the V.I.Lenin Radio Laboratory in Nizhnyy Novgorod

Pistol'kors, N.N.Izotov, and N.N.Palmov spoke on their work with the radio laboratory; Ye.A.Popova-Kyandskaya (daughter of A.S.Popov) discussed the work of her father. Ya.M.Sorin examined "From the Crystal to the Transistor"; the Conference looked at current transistor production in the USSR. Ya.N.Nikolayev assessed the work of the Gor'kiy School regarding the oscillation theory, with special mention of Academician A.A.Andronov. Later, D.V.Ageyev spoke on the work of the Radio Department, Polytechnical Institute, Gor'kiy, and B.L.Lebedev discussed research on radio measuring. Professor L.L.Myasnikov evaluated the work of the Research Institute for Radio physics in Gor'kiy. O.N.Malakhov looked at the observations of radio-physicists during a recent expedition in China, April, 1958, the time of the solar eclipse. Finally, A.I.Shokin, Deputy Chairman, State Committee, Council of Ministers of the USSR on radio-electronics, gave a survey report "The Radio-Engineering Industry on the

Card 2/3

Conference to Commemorate the Founding of the V.I.Lenin Radio Laboratory in Nizhniy Novgorod SOV/142-58-4-30/30

40th Anniversary of the October Revolution". Participants thanked the directors of the Gor'kiy A.S.Popov Association for Radio-Engineering and Electro-Communications for having organized the conference so excellently. There are 3 photographs.

SUBMITTED: May 30, 1958

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SOV/142-58-5-22/23

6(4)

AUTHORS: Gaplichuk, O.M., Engineer, and Ivanov, N.I., Engineer

TITLE: Scientific-Technical Conference in Kiyev, Dedicated to Radio Day

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy - radiotekhnika, 1958, Nr 5, pp 631-633 (USSR)

ABSTRACT: The Scientific-Technical Conference was convened from April 22 to April 26, 1958 in Kiyev. The conference was organized by the Ukrainian Republic Board N.P.O.R. and E. imeni A.S. Popov (Ukrainskoye republikanskoye pravleniye NPOR i E Imeni A.S. Popova). The Conference was inaugurated by the Deputy Minister of Telecommunication of the Ukr. SSR, A.T. Tsivun and the Chiefof Technical Control for Radio Electronics attached to the State Committee of the Council of Ministers of the USSR V.A. Govyadinov.

SUBMITTED: May 9, 1958

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SOV/142-2-4-25/26

6 (4, 6)

AUTHOR: Gaplichuk, O.M., Engineer

TITLE: The Scientific-Technological Conference in Kiyev, Dedicated to A.S. Popov's Hundredth Birthday Anniversary

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, 1959, Vol 2, Nr 4, pp 502-505 (USSR)

ABSTRACT: The Akademiya nauk USSR (Academy of Scienes UkrSSR), the Ukrainskoye respublikanskoye pravleniye NTORiE imeni A.S. Popova (Ukrainian Republic Directorate of the NTORiE imeni A.S. Popov) and the Ministerstvo svyazi USSR (Ministry of Communications UkrSSR) convened a scientific-technological conference in Kiyev from May 5 to 8, 1959. The conference was dedicated to A.S. Popov's hundredth birthday anniversary. About 500 specialists heard more than 100 papers and reports in the different conference sections. The first plenary session of the conference was opened by Academician of the AS UkrSSR, K.K. Khrenov. Corresponding Member of the AS UkrSSR, V.I. Siforov, made a speech on "Alek-

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The Scientific-Technological Conference in Kiyev, Dedicated to A.S. Popov's Hundredth Birthday Anniversary

sandr Stepanovich Popov and the Development of Radio Electronics". UkrSSR Deputy Minister of Communications, G.S. Sinchenko, reported on the prospective development of radio communication, broadcasting, television and wire broadcasting in the UkrSSR during the current Seven-Year Plan. Section "Radio Communication, Broadcasting and Television": A.N. Svenson discussed problems of narrowing the signal spectrum in multi-channel radio telephone communication systems. He suggested a communication system in which the signal to be transmitted is not subjected to a principal conversion, but the channel has a variable passband. - V.P. Lyannoy presented the results of a theoretical investigation of the modulated oscillation spectrum with optimum amplitude-phase modulation (suggested first by Corresponding Member of the AS UkrSSR, S.I. Tetel'baum). He discussed the possibilities of the suggested spectrum analysis method from the viewpoint of determi-

The Scientific-Technological Conference in Kiyev, Dedicated to A.S. Popov's Hundredth Birthday Anniversary

ning some requirements for practical circuits. - L.V. Zass, A.G. Konstantinovskiy and R.A. Lipkin showed possibilities of simplifying synchronizing components and the structure of video components to be generated by a TV test signal. - S.S. Kuz'minskiy, G.D. Pyatigorskiy and A.L. Smilyanskiy discussed the development of TV measuring and test equipment. - S.I. Sher, P.Z. Dreyzin and V.Kh. Krul' discussed the possibilities of using the existing TV equipment for 12-channel TV reception. - The reports of Yu.B. Balter and Ye.M. Pugach dealt with the automation of radio communication transmitters and receivers. - V.P. Pilipenko discussed the organization of radio communication control at transmitter sites. - Chief Designer, V.I. Baletov, described the color TV equipment of the Moscow TV station. The Moscow color telecasts are compatible with the conventional black-and-white TV. - A.G. Buryakov and V.M. Vusmanovich explained the principles of cor-

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rection circuits of the resulting color image when transmitting color motion picture films. - At a combined session of the sections "Broadcasting" and "Wire Communication", a number of reports dealt with the transmission of TV signals by coaxial cables, problems of properties and designs of coaxial cables for transmitting TV programs, methods of installing such cables and the principles of simultaneous transmission of TV and telephone signals adopted for the coaxial cable line Moscow - Kiyev. - V.G. Kozinskiy discussed the experiments with the terminal equipment of long-distance TV cable line which is presently installed at the Kiyev TV station. - At the section "Wire Communication" some papers dealt with problems of work mechanization for construction and operation of communication and wire broadcasting lines, new telegraph equipment, protections of communication cables and the use of cable lines for feeding wire broad-

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cast networks. - At the "Sound Engineering" section, a number of reports dealt with magnetic recording. - V.A. Geranin explained the contemporary state of the theory of magnetic signal recording. - G.I. Bezymyannyy reported on investigations of magnetic recording by a special magnetic modulation head. - V.M. Lazarevich discussed the development of modern tape recorder models. - P.I. Tynskiy reported on the calculation of vacuum tube RC-filters which are to be used in sound engineering equipment. - B.F. Natarov explained artificial reverberation and its application. M.V. Laufer discussed the theory of an electromechanical converter in steady-state operation. - Yu.G. Zarenin and V.A. Geranin determined the order of the differential equation of a linear electric circuit with lumped constants in an electroacoustical system. A.V. Chernoochenko suggested a method of automatic control of levels and phases of sound oscillations

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which are to be transmitted by one channel for converting them to multi-channel, stereophonic oscillations. The properties of semiconductors and their practical application in different circuits were discussed at the "Semiconductor Devices" section. N.I. Smirnov, "Frequency Characteristics of the Transistor Amplifier", discussed the frequency dependence of the amplification factor of a multi-stage transistor amplifier. - Ye. F. Doronkin reported on "Methods of Temperature Stabilization of a Multivibrator Composed of Germanium Transistors". Multivibrators in which capacitors are connected to the transistor emitters show a higher thermal stability. He presented a calculation method for a multivibrator with an emitter capacitance and described a temperature stabilization method for multivibrator. - P.V. Bespalov investigated the oscillation frequency stability of a self-oscillator composed of a compound semiconductor tetrode. -

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A.G. Korneyev explained the calculation of a transistorized oscillator, which may be modulated, under consideration of the p-n junctions. - S.M. Gerasimov, A.G. Korneyev and F.K. Kuznetsov discussed methods of plotting the static characteristics of semiconductor devices. V.V. Sidorenko reported on the cathode-ray curve tracer which he developed for plotting the static characteristics of transistors. - In his report "On the Theory of Vacuum Tube and Semiconductor Blocking Oscillators"; V.N. Yakovlev suggested an analysis and calculation method of vacuum tube and semiconductor blocking oscillators. He presented a comparative estimation of semiconductor blocking oscillators. He gave recommendations for selecting circuits which generate pulses of a short duration and with a stable oscillation frequency. R.O. Litvinov and O.M. Frolov explained the dependence of the semiconductor properties on the surface condition of the semiconductor. - L.A.

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Sinitskiy reported on the calculation of periodic operating conditions in semiconducter rectifier circuits. S.M. Gerasimov presented data for calculating the input of semiconductor devices. - Ya.K.Trokhimenko discussed transistorized multivibrator circuits and presented data for circuit calculation. - V.P. Garmash suggested a transistorized pulse duration modulator circuit. - A.V. Tsvetkov discussed a method of stabilizing the time parameters of pulses by a quartz in transistorized oscillators. - At the "Radio Physics" section, N.S. Zinchenko reported on the passage of an electron beam thru an undulator. - I.K. Ovchinnikov discussed the unstable states of an electron beam during periodic magnetic focussing. - I.M. Orlov reported on electroluminescence and its prospective application. - Ye.D. Mayboroda discussed Lecher wires. - V.G. Kalina reported on a wideband ferrite modulator. R.N. Bondarenko discussed impedance measurements of a

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crystal detector. - At the "Electronic Automation" section, there were numerous reports on different subjects. Ya.Ye. Belen'kiy, V.N. Mikhaylovskiy and A.I. Svenson reviewed the principal works in the field of commutators for multi-channel telemetering systems. - V.L. Inosov and V.Yu. Lutskiy discussed the use of the pulse code telemetering system for the remote control of gas pipelines. The points to be controlled, the different data transmitters, are called by cyclic code pulses. The system works without contacts. The operation program is provided by a programming device at the control room. - N.D. Dyadyunov reported on the possibility of increasing the accuracy of radio navigation systems by using the information on the motion obtained by acceleration transducers. - M.A. Berezovskiy reported on electronic control devices for production processes. - V.N. Mikhaylovskiy explained some possibilities of increasing the effec-

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tiveness of telemetering. - A.P. Obolonskiy discussed the application of transistorized power amplifiers for driving mechanisms. - V.Ye. Sapeg reported on methods of designing phase measuring instruments. - At the "Electronic Circuits and Circuit Theory" section, Ye. F. Zamora reviewed the scientific research work of the radio engineering department of the L'vovskiy politekhnicheskiy institut (L'vov Polytechnic Institute). - Yu.T. Velichko explained a graphic analytic method of calculating linear radio engineering circuits. - V.M. Volkov analyzed characteristic pecularities of transient processes in logarithmic resonance amplifiers and video-amplifiers. Methods of decreasing the signal time delay were indicated. - V.P. Sigorskiy dealt with the problem of generalizing electric circuit analysis methods. - G.G. Margolin reported on an electronic device for harmonics synthesis. - Ye.P. Sogolovskiy explained the calculation and designing of wideband

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ac balancers. - P.I. Dekhtyarenko reported on electronic zero indicators of a voltage at an infra-low frequency. - A.A. Genis discussed the calculation of circuits with thyratrons without heater filaments. - A.K. Tulin and V.M. Shitnikov discussed frequency divider circuits with ferrite cores having rectangular hysteresis loops. - A.Yu. Ratmanskiy's report dealt with "The Role of Radioactive Radiation Measuring Techniques in the National Economy and Methods of Designing Some Measuring Instruments". - At the "Electronic Computer Engineering" section, 17 papers and reports were submitted by representatives of Ukrainian scientific research institutions. V.M. Glushkov, B.N. Malinovskiy and V.N. Skurikhin: "A Multi-Purpose Control Machine"; K.M. Podkolzina, Z.L. Rabinovich, N.I. Shlyakhova: "Some Methods of Performing Arithmetic Operations by Microprogram Control"; N.L. Levchenko, S.S. Zabara, F.M. Kharchenko: "Standardized Elements

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With Junction Transistors for Electronic Digital Computers"; V.V. Vasil'yev, G.N. Grezdov: "Principles of Building a Device for Visual Observation of Voltages -to be Measured at Numerous Points"; Yu.M. Mazyr: "Some Possibilities of Increasing the Noise-proof Features of Blocking Oscillators in Electronic Digital Computers". - L.N. Dashevskiy reported on the principal elements of the "Kiyev" computer. - Yu.S. Pavlenko: "An Electronic Computer for Calculating the Floor Space in Clothing Factories"; M.O. Gliklikh: "Electronic Automatic Reading Devices"; V.A. Kovalevskiy: "Ferrite-Diode Logic Circuits"; R.G. Ofengenden and V.Z. Serman: "An Automatic Ferrite Core Sorting Machine". - The following reports were heard at the final plenary session: V.M. Glushkov, "Some Problems of Computer Engineering and Computer Mathematics"; and V.S. Polonik "The Present State and the Prospects of Using Television in Industry, Science and Engineering

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in the USSR". - In the resolution it was emphasized that the many thousands of Ukrainian scientists and engineers achieved a considerable progress in the development of all branches of radio electronics and electrical communication.

SUBMITTED: May 27, 1959

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S/142/60/000/01/022/022
E073/E335

AUTHOR: Gaplichuk, O.M., Engineer

TITLE: Scientific and Technical Conference on Using Semiconductor Instruments

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, 1960, Nr 1, pp 133 - 134 (USSR)

ABSTRACT: This conference was held on December 15 - 19, 1959 in L'vov.
It was convened by the Ukrainian and the L'vov Regional Boards of NTORiE imeni A.S. Popov. The conference was opened by the Chairman of the Section for Semiconductor Instruments of the NTORiF Administration of the Ukrainian Republic, Candidate of Technical Sciences S.M. Gerasimov. About 200 representatives of scientific research institutes, higher teaching establishments, industrial undertakings and users from Moscow, Kiyev, L'vov, Khar'kov, Leningrad, etc. participated.
At the plenary meeting the following papers were read: "Conditions of Self-excitation of semiconductor auto-oscillators" and "Problems of Tuning Semiconductor Amplifiers" both by Doctor of Technical Sciences Professor Yu.T.Velichko;

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Scientific and Technical Conference on Using Semiconductor Instruments

"Soviet-produced Transistor" by I.F. Nikolayevskiy;
"High Stability Crystal Diode Oscillators" by Candidate of Technical Sciences A.I. Aleksandrovich;
"Instruments for Visual Observation of Volt-ampere Characteristics of Instruments" by I.A. Sadov;
"Measurement of the Parameters of Transistors at High Frequencies" by I.A. Doroganov.

In the Section on Metering and Computer Engineering the following papers were read:

"On a Method of Transforming Continuous Into Discrete Ones" (with an accuracy of the order of 10^{-3}) by V.Z. Neyderov;
"Transisto- Starting Circuits for Digital Computers" by S.S. Zabar and N.N. Pavlov (Kiyev);
"Experience in the Development of Arithmetic and Control Equipment of Transistorised Computers" by V.G. Filipov (Moscow);
"Multiphase Pulse Generators with Semiconductor Triodes" by V.N. Mikhaylovskiy and Ya.Ye. Belen'ko;
"Input Equipment of a 100-channel Transistorised Amplitude Analyser" by A.V. Nikolayev (Moscow);

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E073/E335

Scientific and Technical Conference on Using Semiconductor Instruments

"On the Temperature Self-compensation of Detector Voltmeters Operating with Modern Germanium and Silicon Diodes" by B.F. Grachev;
"Method of Measuring the Parameters of Semiconductor Triodes at Radio Frequencies" by Z.V. Girnyak (L'vov);
"Phase-sensitive Semiconductor Amplifier for Automatic Instruments" by M.S. Kidun and V.Sh. Penik (L'vov);
"Application of the Method of Subcircuits for Analysis of Circuits Containing Semiconductor Devices" by B.I. Blazhkevich (Docent of the Institute of Machinery and Automation, Ac.Sc. Ukrainian SSR - L'vov);
In the Section on General Properties and Application of Semiconductor Instruments, the following papers were read:
"Practical AC Amplifier Circuits Stabilised Within a Very Wide Range of Frequencies" by V.T. Romanov;
"Determination of the Regime and Operation of a Semiconductor Triode" by B.I. Blazhkevich;
"Relative Changes in the Fundamental Values of Semiconductor Amplifiers in Changing the Semiconductor Parameters" by L.Ya. Nagornyy;

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E073/E335

Scientific and Technical Conference on Using Semiconductor Instruments

"Temperature Stabilisation of Crystal Triode Amplifiers by Means of Thermal Resistances" by V.T. Romanov;
"Application of Semiconductors for Transforming the Voltages and Method of Calculation of Such Transformers" (for powers of 2 - 100 W) by K.S. Glinenko and I.L. Reznichenko.

SUBMITTED: December 28, 1959

Card 4/4

GAPLICHUK, O. M.

In the Ukrainian Administration of the A.S. Popov Scientific and Technical Society of Radio and Electronics. Radiotekhnika 15 no.6:78-79 Je '60. (MIRA13:7)
(Ukraine--Electronics)

GAPLICHUK, O.N

The 65th anniversary of the invention of radio. Radiotekhnika 15 no.10:76-78 O '60. (MIRA 14:9)
(Radio)

GAPLICHUK, C.M., inzh.

Scientific and technical conference in Kiev dedicated to "Radio Day." Izv.vys.ucheb.zav.; radiotekh. 5 no.5:657-659 S-O '62. (MIRA 15:11)

(Radio—Congresses)

CHIZHEVSKAYA, I.I.; SAMUYLENKO, L.I.; GAPNOVICH, L.I.

Synthesis of N,N-bis (2-chloroethyl) amino derivitives from 1-(o-nitro)phenoxy-2,3-epoxypropane. Zhur.ob.khim. 33 no.2: 657-660 F '63. (MIRA 16:2)

1. Institut fiziko-organicheskoy khimii AN Belorusskoy SSR.
(Amines) (Propane) (Epoxy compounds)

GAPOCHKA, O.P.

Spore-pollen complexes in the Maykop series of the Dzhagali area in Megreliya. Trudy VNIIGAZ no.10:277-284 '60.
(MIRA 13:10)

(Georgia--Palynology)

GAPOCHKA, G.P.

Palynological study of Maikop sediments in the Bol'shetokmakskiy area of Zaporozh'ye Province. Dokl.AN SSSR 149 no.3:663-665 Mr '63. (MIRA 16:4)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova. Predstavleno akademikom N.M.Strakhovym.
(Zaporozh'ye Province--Palynology)

KUKHAREVICH, N.Ye.; PALSHKOVA, M.P.; KHARCHENKO, A.A.; GAPOCHKA, I.K., otv. red.; NIKOLAYEVA, T.A., red.

[We prepare ourselves to listen to lectures] Gotovimsia slushat' lektsii. Moskva, No.2. 1963. 100 p. (MIRA 18:3)

1. Moscow. Universitet druzhby narodov. Kafedra russkogo yazyka.

ALEKSANDROV, N.I.; GEFEN, N.Ye.; GAPOCHKO, K.G.; GARIN, N.S.; KORIDZE, G.G.; MARKOZASHVILI, I.N.; OSIPOV, N.P.; PISCHIK, M.P.; POSOBILO, I.A.; SMIRNOV, M.S.; TUROV, V.P.

Aerosol immunization with dry pulverized anatoxins and vaccines. Report No.8: Studies on a method of aerosol immunization with pulverized antiplague vaccine of large numbers of persons. Zhur. mikrobiol., epid. i immun. 33 no.7:46-50 Jl '62. (MIRA 17:1)

(Гапочка, М.П.

SUBJECT: USSR/Religion and Communism 25-4-15/34

AUTHOR: Gapochka, M.P., Aspirant

TITLE: About old and new Builders of Religion (O Ekgostroitelyakh Starykh i Novykh)

PERIODICAL: Nauka i Zhizn' - April 1957, No 4, pp 36-39 (USSR)

ABSTRACT: The infiltration of religious ideas into the teachings of communism have always been and still are a matter of great concern to communist party leaders. "There is no higher ideal but communism", is their slogan. Religion holds down the working classes and thus enables their exploiters to keep them in slavery. Lenin was constantly pointing out that attempts to combine any socialism with religion must not be tolerated.

The article contains three photos.

ASSOCIATION: Institut Filosofii an SSSR (Institut of Philosophy of the Academy of Science of the USSR)

PRESENTED BY:

SUBMITTED:

AVAILABLE: At the Library of Congress

Card 1/1

GAPOCHKA, M. P.

Dissertation defended for the degree of Candidate of Philosophical Sciences at the Institute of Philosophy

"Criticism by V. I. Lenin of Fideism in the Book Materialism and Empirio-criticism."

Vestnik Akad. Nauk, No. 4, 1963, pp 119-145

GAPOCHKA, V.V., elektromekhanik

What carelessness leads to. Avtom., telem. i sviaz' 7 no.5:42 My '63. (MIRA 16:7)

1. Osnovyanskaya distantsiya signalizatsii i svyazi Yuzhnoy dorogi.
(Railroads—Electric equipment)

GAPOCHKO, Georgiy Fedorovich

DECEASED
c/1963

1964

CARTOGRAPHY

PHOTOGRAMMETRY

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"Fundamental Problems in Epidemiology and Clinical Treatment of Psitacosis," Voyenno-Med. Zhur., No. 6, p. 60, 1955.

GAPOCHKO, K. G., GARIN, N. S. and LEBEDINSKIY, V. A.

"Basic Problems in Epidemiology, Clinic, and Prophylactic of Yellow Fever", Military-Medical Journal, No. 8, p 57, Aug 1955.

GAPOCHKO, K.G., podpolkovnik med.sluzhby, kand.med.nauk, GARIN, N.S., podpolkovnik med.sluzhby, kand.med.nauk, LEBEDINSKIY, V.A., mayor med.sluzhby, kand.med.nauk

Epidemiological significance of equine encephalomyelitis. Voen.-med.zhur. no.12:36-41 D '55 (MIRA 12:1)
(ENCEPHALOMYELITIS)
(HORSES--DISEASES AND PESTS)

GAPOCHKO, KONSTANTIN GEORGIYEVICH

GAPOCHKO, K.G.; GARIN, N.S.; LEBEDINSKIY, V.A.; ZDOROVSKIY, P.F., redaktor

[Clinical aspects and epidemiology of some little known infectious diseases] Klinika i epidemiologiia nekotorykh maloizvestnykh infektsii. Pod. red. P.F. Zdrodovskogo. Moskva, Medgiz, 1957. 214 p. (MLRA 10:4)

(COMMUNICABLE DISEASES)

LEBEDINSKIY, V.A., mayor med. sluzhby, kand. med. nauk; GAPOCHKO, K.G., podpolkovnik med. sluzhby, kand. med. nauk; GARIN, N.S., [illegible] med. sluzhby, kand. med. nauk

Epidemiology, clinical aspects, and prevention of melioidosis; survey of the literature. Voen. med. zhur. no.1:72-78 Ja '57 (MIRA 12:7)
(MELIOIDOSIS,
review (Rus))

GAPOCHKO, K.G., kand.med.nauk

Myocarditis in typhoid-paratyphoid diseases. Terap.arkh. 30 no.9: 73-83 S'58 (MIRA 11:10)

1. Iz kafedry infektsionnykh bolezney (zav. - prof. N.I. Ragoza) Voyenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova i kafedry infektsionnykh bolezney (zav. - deystvitel'nyy chlen AMN SSSR prof. G.P. Rudnev) TSentral'nogo instituta usovershenstvovaniya vrachey.

(TYPHOID FEVER, compl.
myocarditis (Rus))
(PARATYPHOID FEVER, compl.
same (Rus))
(MYOCARDITIS, etiol. & pathogen.
paratyphoid & typhoid fevers (Rus))

In 32 of 62 patients myocardial lesions were seen, as usual during 1st, 2nd, or 3rd week of recovery, and varying from very mikd to very serious. The ECG changes consisted of T- and ST-lowering. Several cases are discussed. Wermut - Gdansk - Wrzeszcz (L,6,18)

ALEKSANDROV, N.I., polkovnik med.sluzhby; GEFEN, N.Ye., polkovnik med.sluzhby; GARIN, N.S., podpolkovnik med.sluzhby; GAPOCHKO, K.G., podpolkovnik med.sluzhby; DAAL'-BERG, I.I., podpolkovnik med.sluzhby; SERGEYEV, V.M., podpolkovnik med.sluzhby

Reactivity to and effectiveness of aerogenic vaccination against certain zoonoses. Voen.-med.zhur. no.12:34-38 D '58. (MIRA 12:12)
(VACCINES AND VACCINATION,
against aerogenic zoonoses (Rus))

GAPOCHKO, K.G.; GROMOZDOV, G.G.

Organization of antibacteriological defense in the U.S.A. Zhur. mikrobiol.epid.i immun. 30 no.7:118-121 Jl '59. (MIRA 12:11)
(BIOLOGICAL WARFARE)

ALEKSANDROV, N.I., general-mayor meditsinskoy sluzhby; GEFEN, N.Ye., polkovnik meditsinskoy sluzhby; GARIN, N.S., podpolkovnik meditsinskoy sluzhby; GAPOCHKO, K.G., podpolkovnik meditsinskoy sluzhby; SERGEYEV, V.M., pdopolkovnik meditsinskoy sluzhby; TAMARIN, A.L., polkovnik meditsinskoy sluzhby; SHLYAKHOV, E.N., kand.med.nauk

Experience in massive aerogenic vaccination against anthrax. Voen.-med.zhur. no.8:23-32 Ag '59. (MIRA 12:12)
(ANTHRAX, immunology)
(VACCINATION)

GAPOCHKO, K.G., kand.med.nauk, podpolkovnik meditsinskoy sluzhby

Some features of the clinical course of "Leninogorsk encephalitis."
Voen.-med.zhur. no.9:42-45 S '59. (MIRA 13:1)
(ENCEPHALITIS, EPIDEMIC)

BURGASOV, P.N.; GAPOCHKO, K.G.

Vaccine prophylaxis in the U.S.A. Zhur.mikrobiol.epid.i immun. 30 no.10:130-136 O '59. (MIRA 13:2)
(VACCINATION)

ALEKSANDROV, N.I.; GEFEN, N.Ye.; GAPOCHKO, K.G.; GARIN, N.S.

Aerosol immunization with dry live vaccines and antitoxins. Part 4: Characteristics and dynamics of the vaccinal process following aerosol vaccination with brucellosis, tularemia, anthrax and plague dust vaccines. Zhur. mikrobiol. epid. i immun. 31 no.2:38-44 D '60. (MIRA 14:6)

(VACCINATION) (BRUCELLOSIS) (TULAREMIA)
(ANTHRAX) (PLAGUE)

ALEKSANDROV, N.I.; GEFEN, N.Ye.; GARIN, N.S.; GAPOCHKO, K.G.

Aerosol immunization with dry living vaccines and toxoids. Report No. 3: Experimental study of the effectiveness of aerosol immunization with dry dust-type vaccines (anthrax, brucellosis, tularemia and plague). Zhur. mikrobiol. epid. i immun. 31 no. 10:44-50 O '60. (MIRA 13:12)

(VACCINATION)

ALEKSANDROV, N.I.; GEFEN, N.Ye.; GAPOCHKO, K.G.; GARIN, N.S.; SERGEYEV, V.M.; LAZAREVA, Ye.S.; MISHCHENKO, V.V.; SHLYAKHOV, E.N.

Aerosol immunization with dry live vaccines and anatoxins. Report No.6: Study of the reactogenic and immunological effectiveness of aerosol immunization with spray vaccines (brucellosis, tularemia, anthrax and plague) in man. Zhur. mikrobiol. epid. i immun. 32 no.7:56-62 Je '61. (MIRA 15:5)

(VACCINATION) (AEROSOLS)
(COMMUNICABLE DISEASES--PREVENTION)

ALEKSANDROV, N.I.; GEFEN, N.Ye.; GAPOCHKO, K.G.; GARIN, N.S.; SERGEYEV, V.M.; SMIRNOV, M.S.

Aerosol immunization with dry live vaccines and anatoxins. Report No.7: Organization, methods, and technic of mass aerosol immunization of human subjects with atomized vaccines. Zhur. mikrobiol., epid. i immun. 32 no.9:3-7 S '61. (MIRA 15:2)
(VACCINATION) (AEROSOLS)

GAPOCHKO, K.G.

Therapeutic effectiveness of strychnine in diphtheria. Sov.med. no.3:65-73 '62. (MIRA 15:5)

1. Iz kafedry infektsionnykh bolezney (nach. - zasluzhennyy deyatel' nauki N.I. Ragoza [deceased]) Voyenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova.
(DIPHTHERIA) (STRYCHNINE)

S/016/62/000/007/C01/002
D037/D113

AUTHORS: Aleksandrov, N.I., Gefen, N.Ye., Gapochko, K.G., Garin, N.S., Koridze, G.G., Markozashvili, I.N., Osipov, N.P., Pischik, M.P., Posobilo, I.A., Smirnov, M.S. and Turov, V.P.

TITLE: Aerosol immunization with dry dust vaccines and anatoxins. A study of the method of aerosol immunization with dust plague vaccines during mass immunization.

PERIODICAL: Zhurnal mikrobiologii, epidemiologii i immunobiologii, no. 7, 1962, 46-50

TEXT: Tests were conducted to approve the practical use of mass aerosol immunization with plague vaccine and to check and specify previously obtained data which testified that this vaccination method was safe and had a low reactivity. Dust plague vaccine was used in a dose of 150-200 million living microbes of the vaccine EB strain. Four 15-min. seances took place with up to 190 persons at a time in a 112 m^3 room. On the days following vaccination, 157 persons were subjected to X-ray and hematological tests.

Card 1/2

It was found that the reactivity of this method is much lower than that of the subcutaneous and cutaneous immunization methods. Conclusions: (1) Aerosol immunization with dust plague vaccine, using the above-mentioned dose, provoked no distinct reaction but caused characteristic changes in the peripheral blood. (2) This method, tested under practical conditions on 543 persons, is very simple and allows the population to be mass-immunized against plague within a short time. There is 1 table.

SUBMITTED: August 8, 1961

Card 2/2

GAPOCHKO, K.G.; ALIYEV, A.M.; ZELKIND, D.B., kand.med.nauk; STATSENKO, A.A.; ESTER, E.; BELEDA, R.V.; AZNAUR'YAN, M.S.

Abstracts. Sov.med. 26 no.7:141-144 Jl '62. (MIRA 15:11)

1. Iz kafedry infektsionnykh bolezney Voyenno-meditsinskoy ordena Lenina akademii imeni S.M.Korova (dor Gapochko). 2. Iz fakul'tetskogo terapevticheskogo otdeleniya Dagestanskoy respublikanskoy klinicheskoy bol'nitsy (for Aliyev). 3. Iz kozhnogo otdeleniya poliklinik No. 68, Moskvy (for Zelkind). 4. Iz Dokshukinskoy rayonnoy bol'nitsy Kabardino-Balkarskoy ASSR (for Statsenko). 5. Iz Myysakyul'skoy gorodskoy bol'nitsy Estonskoy SSR (for Ester).

(MEDICINE—ABSTRACTS)

ALEKSANDROV, N.I.; GEFEN, N.Ye.; GAPOCHKO, K.G.; GARIN, N.S.; MASLOV, A.I.; MISHCHENKO, V.V.

Aerosol immunization with dry powder vaccines and anatoxins. Report No.10: Clinical study of postvaccinal reactions to aerosol immunization with dry brucellosis vaccine. Zhur. mikrobiol., epid. i immun. 33 no.11:31-37 N '62. (MIRA 17:1)

ALEKSANDROV, N.I.; GEFEN, N.Ye.; GAPOCHKO, K.G.; GARIN, N.S.; MASLOV, A.I.
MISHCHENKO, V.V.; SMIRNOV, M.S.

Aerosol immunization with dry powder vaccines and anatoxins.
Report No.9: Further study of the reactivity and immunological
effectiveness of the method of aerosol immunization with brucel-
losis powder vaccine. Zhur.mikrob.,epid. i immun.33.no.12:95:102.D '62.
(BRUCELLA) (VACCINES) (AEROSOL THERAPY) (MIRA 16:5)

ALEKSANDROV, N.A.; GEFEN, N.Ye.; GAPOCHKO, K.G.

Aerosol immunization with dried powder vaccines and anatoxins. Report No.9: Study of the effectiveness of the aerosol method of revaccination with powdered Brucella vaccine. Zhur. mikrobiol., epid. i immun. 40 no.2:42-48 F '63. (MIRA 17:2)

ALEKSANDROV, N.I.; GEFEN, N.Ye.; GAPOCHKO, K.G.; GARIN, N.S.; GORDON, G.Ya. KOZHUSHKO, M.I.; KORENEV, G.P.; LAZAREVA, Ye.S.; LEYKEKHMAN, Ye.P.; MASLOV, A.I.; PAVLOV, G.A.; POLIVANOV, N.D.; ROMANOV, P.S.; RYBAKOV, P.S.; RYBAKOV, M.G.; SAMOKHVALOV, M.F.; SMIRNOV, M.S.; SHTERN, M.A.; CHEPKOV, V.N.

Experience with mass aerosol immunization with tularemia dust vaccine. Zhur. mikrobiol., epid. i imm. 41 no. 2:140-43 F '64. (MIRA 17:9)

ALEKSANDROV, N.I.; GEFEN, N.Ye.; GAPOCHKO, K.G.; GARIN, N.S.; DANILYUK, S.S.; YEGOROVA, L.L.; KUZINA, R.F.; KORIDZE, G.G.; [redacted]; LABINSKIY, A.P.; LEBEDINSKIY, V.A.; MASLOV, A.I.; OSIPOV, N.P.; SILICH, V.A.; SMIRNOV, M.S.; TSYGANOVA, N.I.

Study of a method of aerosol immunization with powdered plague vaccine in large population groups. Zhur. mikrobiol., epid. i immun. 40 no.12:22-28 D '63.

(MIRA 17:12)

LIMNIK, G.F., kand.tekhn.nauk; KOVALEV, A.F., kand.tekhn.nauk; BELASH, A.S., inzh.; FEDOROVSKIY, V.V., inzh.; KRYLOV, Ye.G., inzh.; KULINICH, N.T., inzh.; GAPON, A.M. technik.

Railroad switching from the machinist's cabin. Gor.zhur. no.2: 62-63 F '64 (MIRA 17:4)

1. Institut avtomatiki Gosplana UkrSSR, Kiyev.

BAYBAKOV, Aleksandr Borisovich; KATS, Revekka Samsonovna; OSTAF'YEV, A.I., red.; NOSAROV, M.F., red.; MONETA, A.A., red.; GAPON, G.I., red.; SNIGUR, Ye.Ya., red.; NOVIK, A.M., red.; MATUSEVICH, S.M., tekhn. red.

["Leninskaia Kuznitsa" Plant] Zavod "Leninskaia kuznitsa." Kiev, Gos. izd-vo tekhn. lit-ry USSR, 1962. 172 p. (MIRA 15:3)
(Kiev—Machinery industry)

GAPON, G. V., ALEKSANDROVA, O. S. and CHMUTOV, K. V.

"Investigation of the Physicochemical Properties of Ion-Exchange Resins with the Purposeof Standardising Them," an article included in the book "The Theory and Practice of the Application of Ion-Exchange Agents," edited by K. V. Chmutov and published by the AS USSR, 1955, 164 pp.

Laboratory control in the by-product coke industry Moskva, Gos. nauchno-tekhn. izd -vo lit-ry po chernoi i tsvetnoi metallurgii, 1950. 234 p. (51-38775)

TP336.G3

KORF, N., polkovnik; GAPON, I., polkovnik

Operations of a division in the desert. Voen. vest. 43 no.9: 26-29 S '63. (MIRA 16:10)

(Desert warfare)

GAPON, Ivan Ivanovich; SVET,I.Sh., redaktor; SIRENKO,S.M., redaktor; ANDREYEV,S.P., tekhnicheskiy redaktor

[Organization of plant chemical laboratories in the metallurgical industry] Organizatsiia zavodskikh khimicheskikh laboratorii v metallurgicheskoi promyshlennosti. Khar'kov, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1955. 169 p. (MLRA 9:4)
(Metallurgical laboratories)

SOV/137-58-7-16116

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 312 (USSR)

AUTHOR: Gapon, I. I.

TITLE: Determination of the Phosphorus Contents in Coal and Coke and its Distribution in Concentrates (Opredeleniye soderzhaniya fosfora v ugle i kokse i raspredeleniye yego v produktakh obogashcheniya)

PERIODICAL: Izv. Dnepropetr. gorn. in-ta, 1957, Vol 26, pp 71-72

ABSTRACT: For the determination of P in coal (C) and coke (K) there are several methods of which the burning of C and K with CaO or $CaCO_3$ is no longer practiced; the treatment of C and K with HNO_3, H_2SO_4, and HCl does not produce accurate results because the P in the organic compounds is not determined; the use of ortho-oxiquinoline is slower and less precise than the photocolorimetric method; the fusion of C and K ash with MgO and Na_2CO_3 followed by treatment with acids is not applied in practice. It is established that the determination of P in C and K by means of the burning of a test sample with additions of soda and MgO should be considered as the most correct method. The analysis is concluded by the

Card 1/2

SOV/137-58-7-16116

Determination of the Phosphorus Contents in Coal and Coke (cont.)

photocolorimetric or the gravimetric method. The volumetric method of determination of P is less precise than the gravimetric but faster. The extraction method is inferior to the photocolorimetric, volumetric, and gravimetric methods in the precision of P determination. Investigations showed that there are certain laws governing the distribution of P in coal concentrates.

1. Phosphorus--Determination 2. Coal--Analysis 3. Coke--Analysis

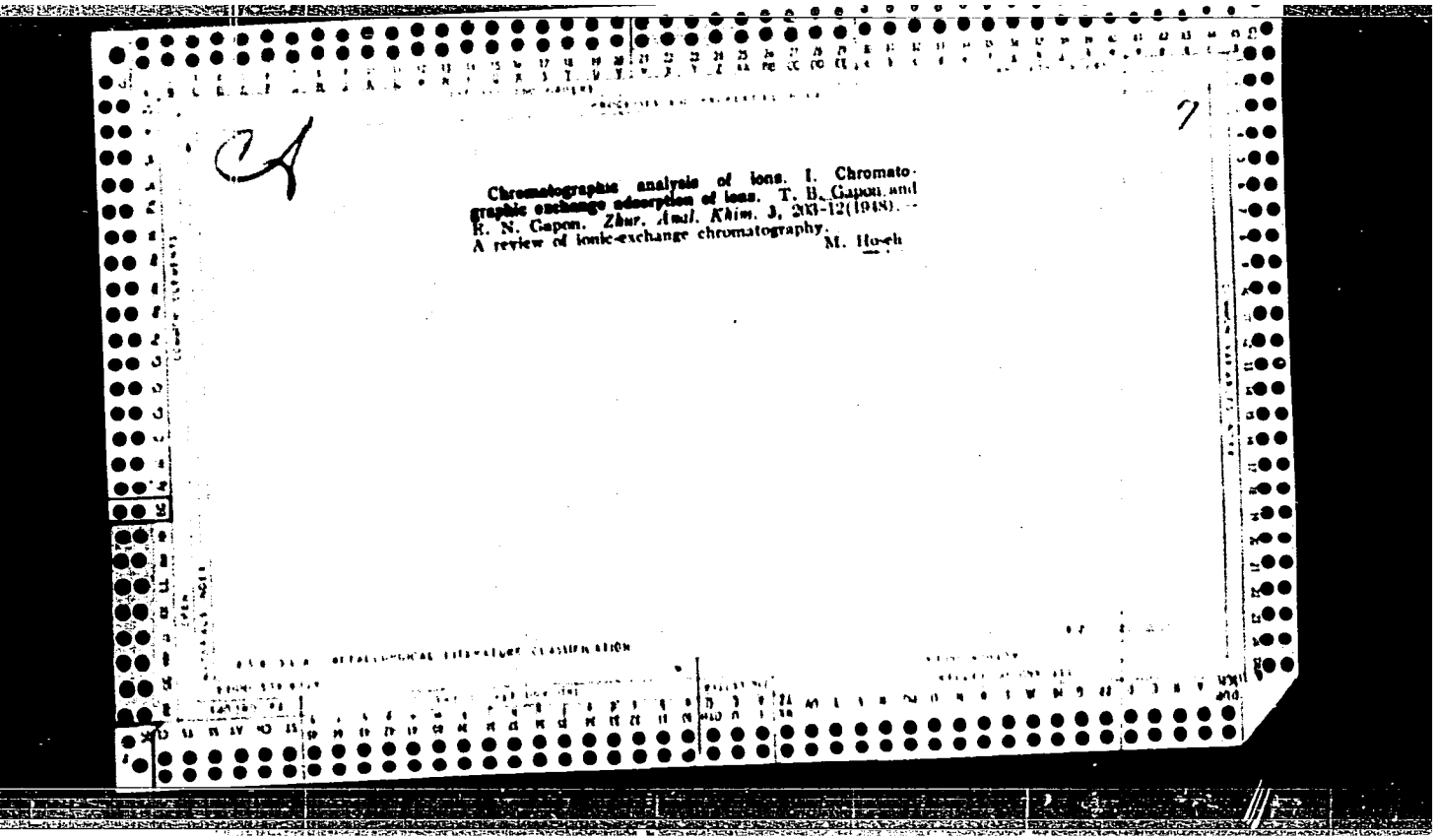
V. N

Card 2/2

GAPON, M.S., inzh.; TIMCHENKO, V.I.

Machine for manufacturing springs with a continuous twist. Der.prom. 9 no.10:21-22 O '60. (MIRA 13:10)

1. Kremenchugskiy derevoobrabatyvayushchiy kombinat.
(Springs (Mechanism))



Chromatographic analysis of ions. I. Chromatographic exchange adsorption of ions. T. B. Gapon and E. N. Gapon. *Zhur. Anal. Khim.* 3, 203-12(1948).—A review of ionic-exchange chromatography. M. Hoeh

USSR/Chemistry - Chromatography Jul/Aug 48
Chemistry - Ions, Electrolytic

"Chromatographic Analysis of Ions: I, Chromatographic Exchange Adsorption of Ions," T. B. Gapon, Ye. N. Gapon, Moscow Tech Inst of Fishing Ind and Econ imeni A. I. Mikoyan, 10 pp

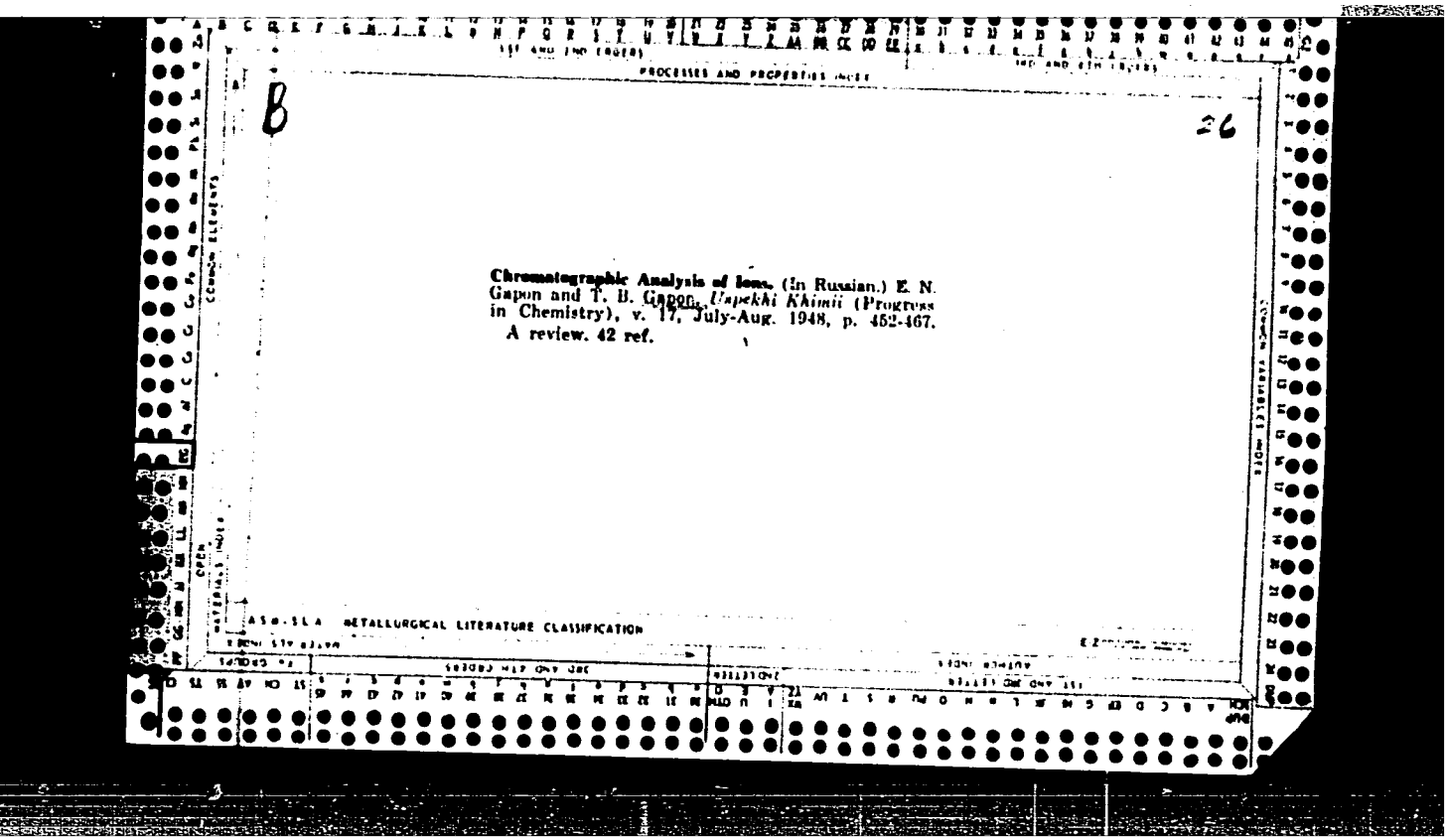
"Zhur Analit Khimii" No 4

Shows that, depending on character of chemical process occurring during percolation of a solution of salts through a column of adsorbent, the ion chromatograms formed may be of three types: (I) molecular, (II) exchange - ionic, (III) precipitation. (II) is divided into (a) primary, (b) [illegible] washed, and (c) developed. Assigns name of permutid to (II). Chromatographic division of ions in permutid is due to (1) differences in exchange, caused by permutid structure (intra- and extra-crystalline exchange) and (2) differences in the adsorbability of the ions. Chromatographic division of cations on oxide of aluminum, barium aluminate, bentonite clay and permutid is connected with exchange of aluminate group cation for solution cation. Sequence in which exchange cation chromatograms are formed on permutid is as follows (moving along column from top to bottom): Ni^{2+} Fe^{3+}, Cu^{2+}, UO_2^{2+}, Co^{2+}, Mn^{2+}.

Shows, working from exchange adsorption isotherm, that cation zones cannot be chemically pure with respect to one cation. Submitted 20 Oct 47.

GAPON, T. B.

18/49T8



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26

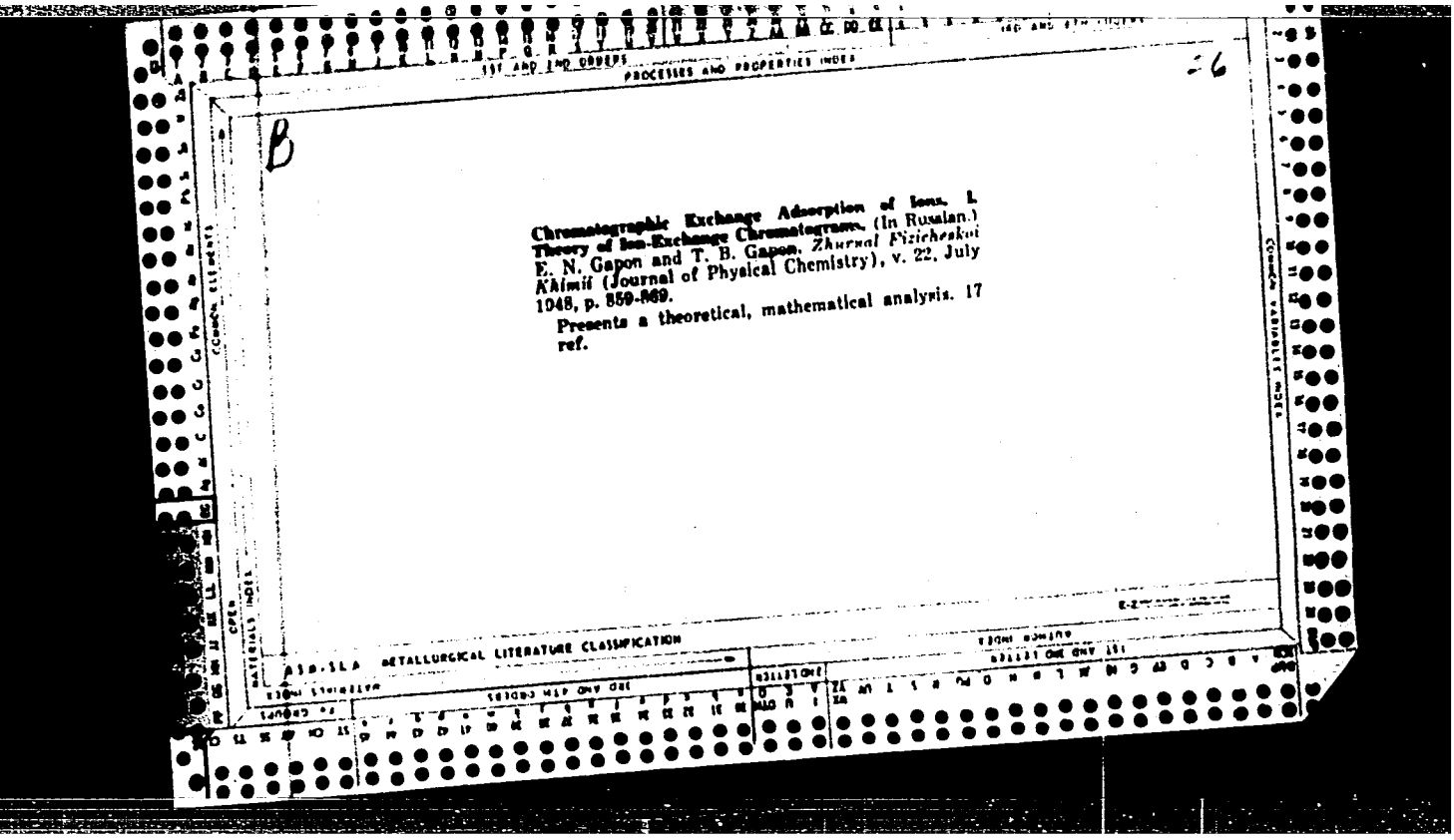
Chromatographic Analysis of Ions. (In Russian.) E. N. Gapon and T. B. Gapon. *Uspekhi Khimii* (Progress in Chemistry), v. 17, July-Aug. 1948, p. 452-467. A review. 42 ref.

CA

2

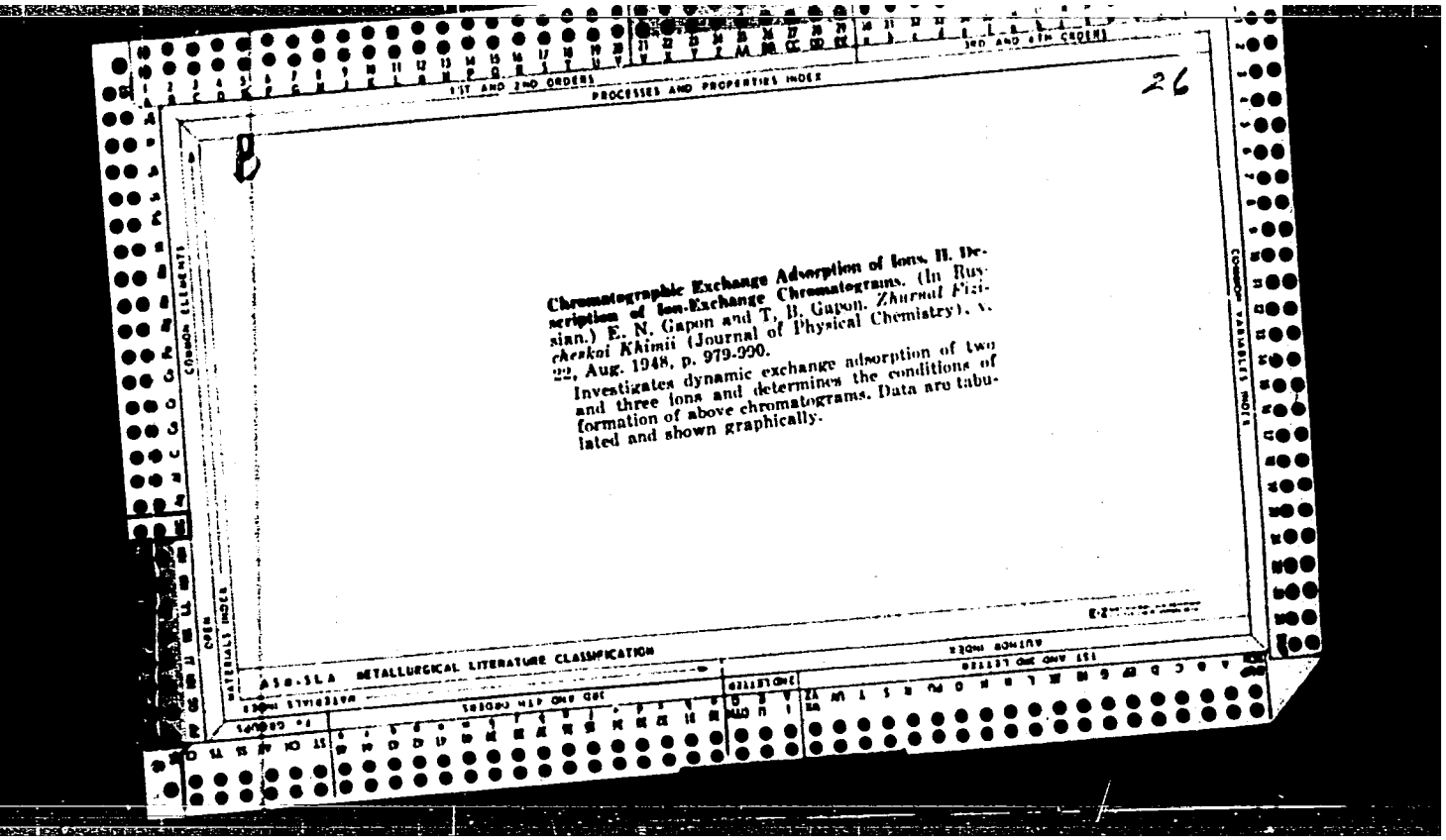
Dynamics of ion exchange. E. N. Gapon and T. B. Gapon (A. I. Mikoyan Tech. Inst. Fish Ind., Moscow). *Zhur. Prikład. Khim.* (*J. Applied Chem.*) 21, 937–47 (1948); *cf. C.A.* 43, 4685a.—Consideration of an exchange column subdivided into i layers of g g. each, with the electrolyte soln. passed through in j portions of v ml. each, shows that the increase of the adsorbed mole fraction of an ion is detd. by its initial mole fractions in the adsorbed state and in soln., the ion exchange const. K, and the ratio $\Delta\gamma$ of the abs. amt. of exchanged ions in soln. and in the solid adsorbent. Depending on whether $\Delta\gamma = 1$, < 1, or > 1, ion-exchange columns are classified into isomonic, hyperionic, or hypoionic, resp. For $\Delta\gamma = 1$, the relation between the vol. of soln. passed and the mass of the adsorbent is of the form $j = \alpha i - \beta$, where $1 \leq \alpha \leq 2$, and $\beta \leq 0$. For $K = 0.01$ or 0.1, $\alpha = 2$ and for $K = 1$, $\alpha = 1$. In the extreme cases $K = 0$ and $K = \infty$, $\alpha = 2$ and $\alpha = 1$, resp. This equation is analogous to that of Shilov, Lepin, and Voznesenskii (*C.A.* 34, 708) for the sorption of vapors.

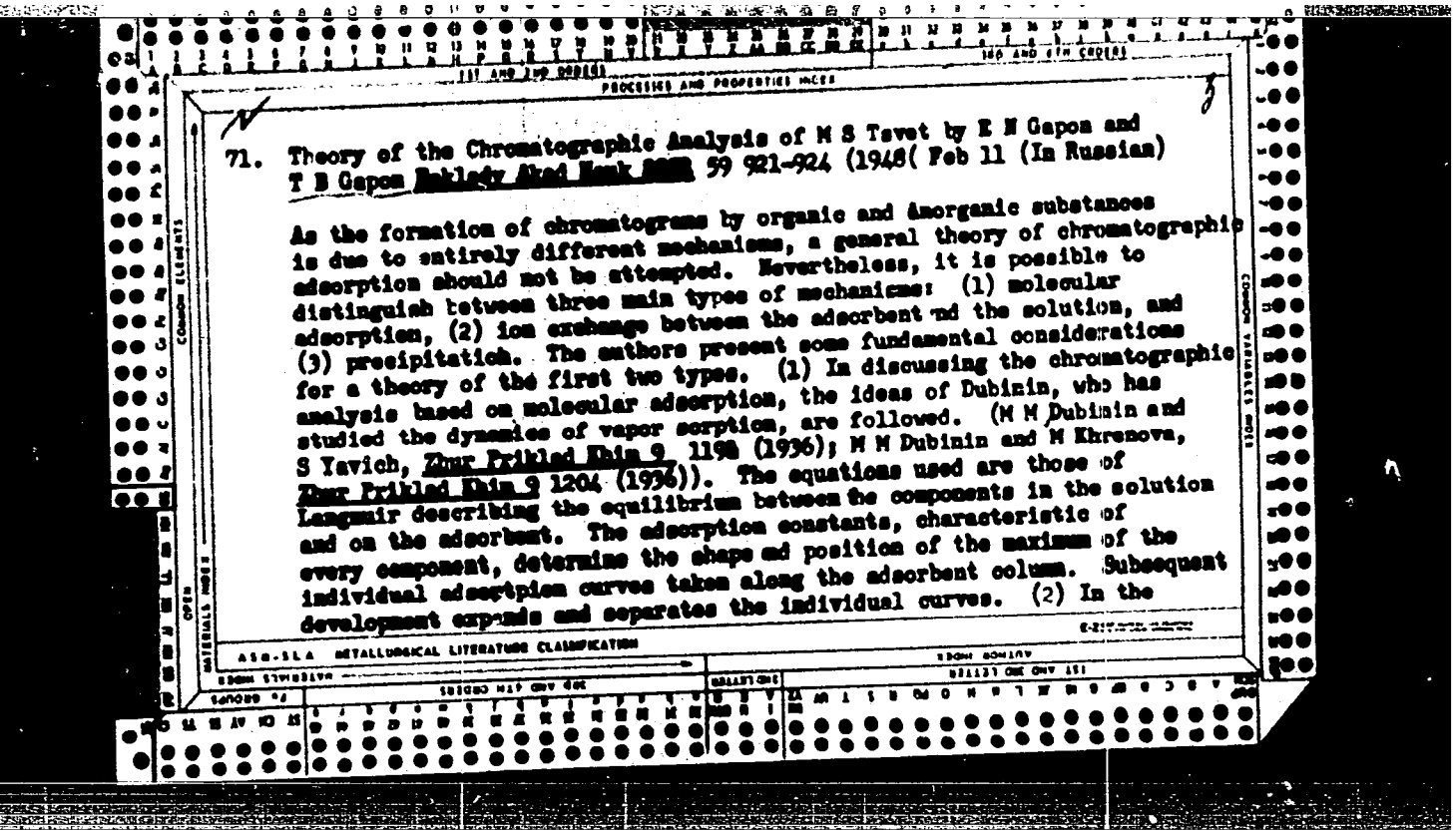
N. Thon



Chromatographic Exchange Adsorption of Ions. I. Theory of Ion-Exchange Chromatograms. (In Russian.) E. N. Gapon and T. B. Gapon. *Zhurnal Fizicheskoi Khimii* (Journal of Physical Chemistry), v. 22, July 1948, p. 859-869.

Presents a theoretical, mathematical analysis. 17 ref.

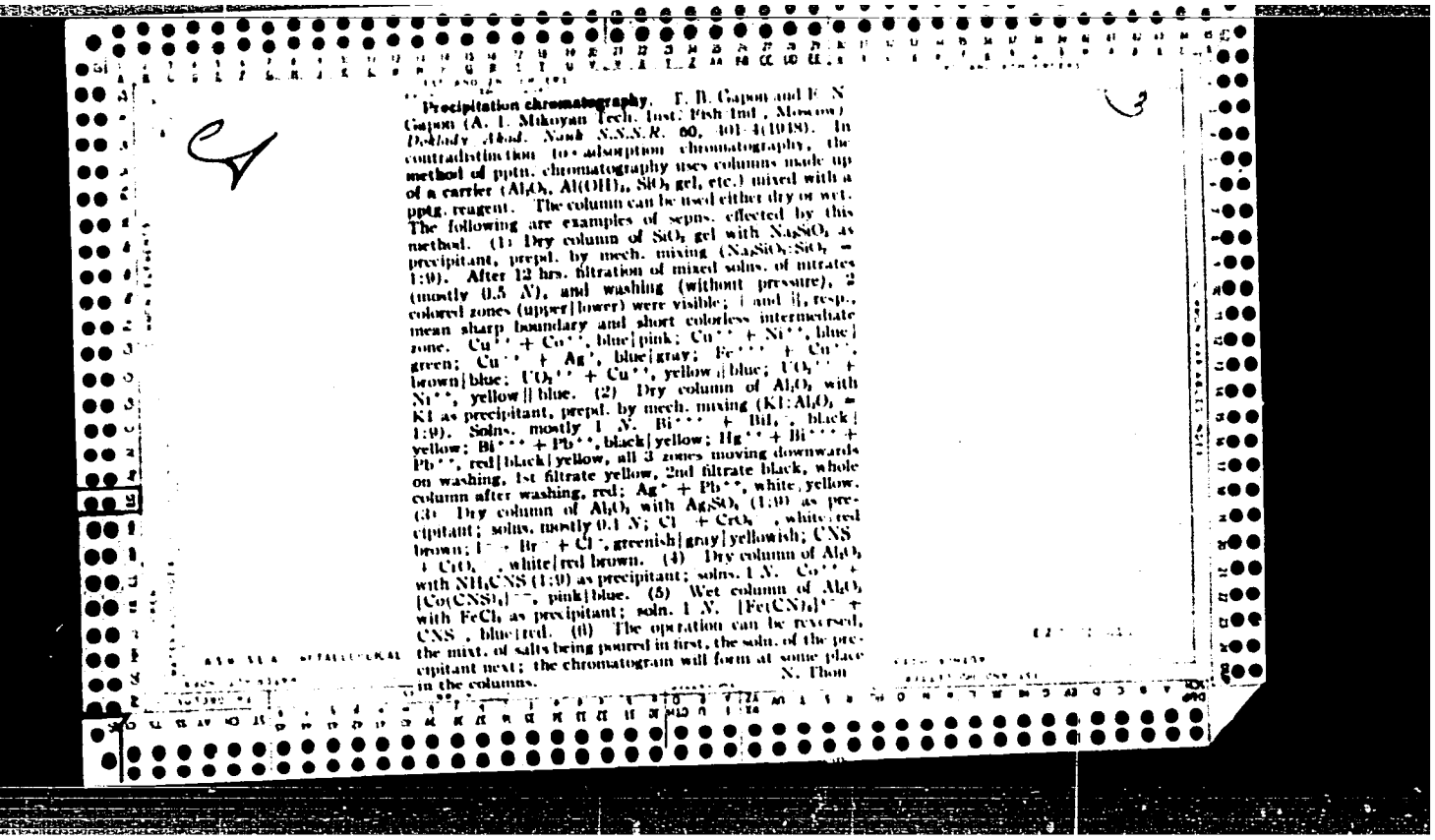




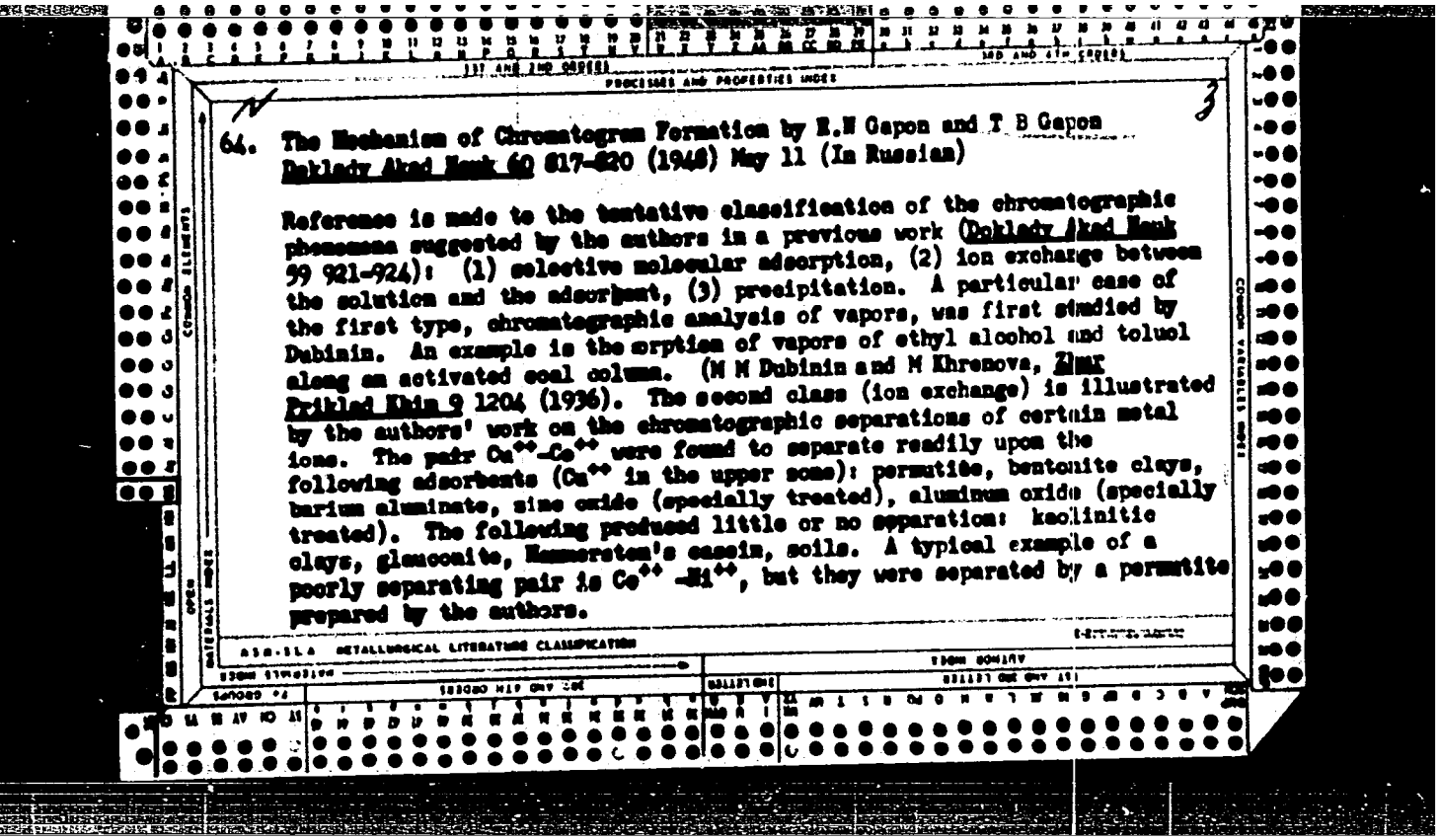
71. Theory of the Chromatographic Analysis of M S Tsvet by E N Gapon and T B Gapon [redacted] 59 921-924 (1948(Feb 11 (In Russian)

As the formation of chromatograms by organic and inorganic substances is due to entirely different mechanisms, a general theory of chromatographic adsorption should not be attempted. Nevertheless, it is possible to distinguish between three main types of mechanisms: (1) molecular adsorption, (2) ion exchange between the adsorbent and the solution, and (3) precipitation. The authors present some fundamental considerations for a theory of the first two types. (1) In discussing the chromatographic analysis based on molecular adsorption, the ideas of Dubinin, who has studied the dynamics of vapor sorption, are followed. (M M Dubinin and S Yavich, Zhur Prikład Khim 9 1198 (1936); M M Dubinin and M Khrenova, Zhur Prikład Khim 9 1204 (1936)). The equations used are those of Langmuir describing the equilibrium between the components in the solution and on the adsorbent. The adsorption constants, characteristic of every component, determine the shape and position of the maximum of the individual adsorption curves taken along the adsorbent column. Subsequent development expands and separates the individual curves. (2) In the

equilibrium equations describing the phenomenon of ion exchange, the volume of the pores per unit volume of the adsorbent is taken into account. An exact computation of the composition along the column would require the integration of a differential equation. The authors preferred the more expedient method of finite differences.



Precipitation chromatography. T. B. Gapon and E. N. Gapon (A. I. Mikoyan Tech. Inst. Fish Ind., Moscow). *Doklady Akad. Nauk S.S.S.R.* 60, 401-4(1948). In contradistinction to adsorption chromatography, the method of ppn. chromatography uses columns made up of a carrier (Al_2O_3, $Al(OH)_3$, SiO_2 gel, etc.) mixed with a ppg. reagent. The column can be used either dry or wet. The following are examples of seps. effected by this method. (1) Dry column of SiO_2 gel with Na_2SiO_3 as precipitant, prepd. by mech. mixing (Na_2SiO_3:SiO_2 = 1:9). After 12 hrs. filtration of mixed solns. of nitrates (mostly 0.5 *N*), and washing (without pressure), 2 colored zones (upper|lower) were visible; I and II, respectively, mean sharp boundary and short colorless intermediate zone. Cu^{++} + Co^{++}, blue|pink; Cu^{++} + Ni^{++}, blue|green; Cu^{++} + Ag^{+}, blue|gray; Fe^{+++} + Cu^{++}, brown|blue; UO_2^{++} + Cu^{++}, yellow|blue; UO_2^{++} + Ni^{++}, yellow|blue. (2) Dry column of Al_2O_3 with KI as precipitant, prepd. by mech. mixing (KI:Al_2O_3 = 1:9). Solns. mostly 1 *N*. Bi^{+++} + BiI_4^-, black|yellow; Bi^{+++} + Pb^{++}, black|yellow; Hg^{++} + Bi^{+++} + Pb^{++}, red|black|yellow, all 3 zones moving downwards on washing, 1st filtrate yellow, 2nd filtrate black, whole column after washing, red; Ag^{+} + Pb^{++}, white, yellow. (3) Dry column of Al_2O_3 with $AgSO_4$ (1:9) as precipitant; solns. mostly 0.1 *N*; Cl^- + CrO_4^{--}, white|red brown; I^- + Br^- + Cl^-, greenish|gray|yellowish; CNS^- + $Cr(O)_4^{--}$, white|red brown. (4) Dry column of Al_2O_3 with NH_4CNS (1:9) as precipitant; solns. 1 *N*. Co^{++} + $[Co(CNS)_4]^{--}$, pink|blue. (5) Wet column of Al_2O_3 with $FeCl_3$ as precipitant; soln. 1 *N*. $[Fe(CN)_6]^{---}$ + CNS^-, blue|red. (6) The operation can be reversed, the mixt. of salts being poured in first, the soln. of the precipitant next; the chromatogram will form at some place in the columns. N. Thon



64. The Mechanism of Chromatogram Formation by E.N Gapon and T B Gapon Doklady Akad Nauk 60 817-820 (1948) May 11 (In Russian)

Reference is made to the tentative classification of the chromatographic phenomena suggested by the authors in a previous work (Doklady Akad Nauk 59 921-924): (1) selective molecular adsorption, (2) ion exchange between the solution and the adsorbent, (3) precipitation. A particular case of the first type, chromatographic analysis of vapors, was first studied by Dubinin. An example is the sorption of vapors of ethyl alcohol and toluol along an activated coal column. (M M Dubinin and M Khrenova, Zhur Prikład Khim 9 1204 (1936). The second class (ion exchange) is illustrated by the authors' work on the chromatographic separations of certain metal ions. The pair Cu^{++}-Co^{++} were found to separate readily upon the following adsorbents (Cu^{++} in the upper zone): permutite, bentonite clays, barium aluminate, zinc oxide (specially treated), aluminum oxide (specially treated). The following produced little or no separation: kaolinitic clays, glauconite, Hammerstein's casein, soils. A typical example of a poorly separating pair is Co^{++} -Ni^{++}, but they were separated by a permutite prepared by the authors.

In the previous work cited above, the authors studied the dependence of the chromatographic effect on the adsorption constants of the components. In the present article they discuss the part played by the lattice structure of the adsorbent. Kaolinite, with crystal hollows 2-3 A wide, is capable of extracrystallic adsorption only. On montmorillonite (chief component of bentonitic clays), which has hollows 8-20 A wide, intracrystallic adsorption can take place. The hollows in chabazite are 3-5 A wide. Accordingly, the exchange of NH_4^+ (2.9 A diameter) on Ca-chabazite is intracrystallic, while that of $N(CH_3)_4^+$ (7 A diameter) is extracrystallic; this difference permits the chromatographic separation of NH_4^+ (adsorbed) from $N(CH_3)_4^+$ (in the filtrate). On natrolite the exchange of monovalent ions is intracrystallic, that of bivalent ions extracrystallic; therefore, natrolite could be used for the separation of the two kinds of ions.

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Chromatographic analysis of ions. II. Exchange cationic chromatograms of Cu^{++}-Co^{++} and Co^{++}-Ni^{++} T. B. Gapon and E. N. Gapon. *Zhur. Anal. Khim.* 4, 131-5(1949); cf. *C.A.* 43, 5071g.—By passing a soln. contg. equal amts. of Cu^{++} and Co^{++} through an adsorption column, the relation between the length of the zone (λ) occupied by a cation and the vol. of soln. (v) used was found to be $\lambda = \alpha v + \beta$, where α and β are consts. An ideal chromatogram is defined as one consisting of clearly defined zones each of which contains only one ion, and the voids are filled with soln. contg. only the ions displaced from the adsorbent. The length of a zone in an actual chromatogram (λ) differs from λ_0, the length of a zone calcd. for an ideal chromatogram; namely $\lambda > \lambda_0$. This indicates that beside the main ion there are other ions in a zone, namely the other ion in the original soln. and the displaced ion. In another series of expts. Co and Ni were effectively sepd. by using a specially prepd. absorbent. The latter was obtained by mixing carefully prepd. 2% solns. of Na aluminate and Na silicate.

M. Hosch

Chromatography of ions. I. Theory of chromatometry. E. N. Gapon and T. B. Gapon (Timiryazev Agr. Acad., Moscow). *Zhur. Obshchei Khim.* (J. Gen. Chem.) 19, 1027-34(1949); cf. *C.A.* 43, 4053i.—In the case of pure cation exchange, i.e. in the absence of secondary anion adsorption, the length of the zone λ_i of the ith ion in an ideal ion exchange chromatogram (where each zone contains only one kind of ion) should be proportional to the concn. c_i of the ion and to the vol. v of soln. passed, $\lambda_i^\circ = vc_i/Q$, where the linear absorption capacity Q is defined by $Q = gS/L$ mg. equiv./cm.; L is the length of the column in cm., g its wt. in g., S the amt. of the exchange ion (mg. equiv.)/g.; in terms of the diam. d of the tube (cm.) and the bulk wt. of the adsorbent W (g./ml.), $Q = \pi d^2WS/4$. Under nonideal conditions, $\lambda > \lambda^\circ$. In expts. with Al_2O_3, $g = 0.782$ g., $L = 4.0$ cm., $d = 0.7$ cm., $W = 0.51$ g./ml., $S = 2.30$ mg. equiv./g., $Q = 0.45$, and a soln. of $CuCl_2$ 0.1 N, $Co(NO_3)_2$ 0.1 N, 1:1 vol., both the upper Cu^{++} and the lower Co^{++} zone increased in length linearly with the vol. v; for the Cu^{++} zone, the empirical $\lambda = 0.15\,v + 0.1$, for Co^{++}, $\lambda = 0.2\,v + 0.5$, whereas $c_i/Q = 0.11$. At $v = 10$ ml., Co^{++} appears in the filtrate. On elution with up to 6 ml. H_2O, the lower part of the Cu^{++} zone becomes of a purer blue, but its length remains substantially unchanged, 1.75 cm. for 0.8 mg. equiv. Cu^{++}, as against the ideal $\lambda^\circ = 1.11$ cm.; consequently, the Cu^{++} zone is not pure but contains also /Na. In an expt. with g 0.680, L 3.6, d 0.6, W 0.676, S 2.30, Q 0.440, soln. $CuCl_2$ 0.1 N, $Co(NO_3)_2$ 0.1 N, 1:3 vol., up to 9 ml., the zone lengths were, for Cu^{++} $\lambda = 0.1$, for Co^{++} $\lambda = 0.4\,v + 0.1$, i.e. twice as long as in the ideal case. With a soln. of Cu^{++} 0.05 N alone, 10 ml., the real λ was 1.2 times the ideal λ°, which again indicates Na ions. With a soln. $CuCl_2$ 0.05 N, $Co(NO_3)_2$ 0.05 N, NaCl 1 N, up to 10 ml. (g 0.784, L 4.0, d 0.7, W 0.522, S 2.30, Q 0.46), the Cu^{++} zone, $\lambda = 0.40\,v + 0.3$, was about 3.5 times, the Co^{++} zone, $\lambda = 1.3\,v$, about 12 times longer than under ideal conditions. Only in very dil. soln., e.g. $CuCl_2$ 0.01 N, $Co(NO_3)_2$ 0.01 N, vol. 1:1, were the zones of equal length, $\lambda = 0.02\,v$, and only twice the ideal λ°. The general emptirical relation, at const. concn., is $\lambda = \alpha v + \beta$, where α and β have in general different values for the different ions in the mixt., contrary to the claim of Schwab and Dattler (*C.A.* 33, 941[4]). At const. vol., the length of a zone is approx. proportional to the initial concn. of the corresponding ion. However, as the length of a zone is strongly influenced by the amt. of other ions, chromatometry is quant. only with respect to an ion having an adsorbability many times that of all other ions present.

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GAPON, T. B.

1896. Dynamics of Ion Exchange (Dinamika ionnogo obmena) by E N Gapon and T B Gapon Zhur Prikladnoi Khim 21 937-947 (1949) Sept (In Russian)

The dynamics of sorption from solutions, unlike that of vapor sorption has been inadequately studied. In the present work a theory is given of these processes for the particular case of ion exchanges. If two ions are being exchanged between a solid adsorber and a solution, the increase of the molar part of one of the ions in the adsorbed state is determined by the following factors: the exchange constant, the initial molar parts of the ion in question in the adsorbed state and in the solution, and the ion ratio, i.e., the ratio of the absolute number of the exchanging ions in the solution to that of the exchanging ions in the adsorber. On the basis of this ratio a classification of ion exchange columns can be made: isoionic column (ion ratio = 1); hyperionic columns (<1), and hypoionic columns (>1). A method is shown for an approximate computation of sorptional distributions of two ions. For the case when the ionic ratio is equal to 1, there exists a linear relationship between the volume of

the solution (of a given concentration) which has passed through the column, and the weight of the adsorbent (of a given adsorption capacity). This relationship has the same physical meaning as a similar equation in the dynamics of vapor adsorption, as derived by Shilov et al. [Zhur Russkogo Khimicheskogo Obschestva 61 1107 (1929)].

GAPON, T. B.

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Chemical Abstracts
Vol. 48 No. 5
Mar. 10, 1954
General and Physical Chemistry

The theory of ion-exchange chromatography. K. N. Gapon, T. B. Gapon and R. S. Zhurakhina. *Issledovaniya v Oblasti Khromatog., Trudy Vsesoyuz. Soveshchaniya Khromatog., Akad. Nauk S.S.S.R., Otdel. Khim. Nauk* 1950, 5–29 (Pub. 1952).—The theory of chromatographic processes is discussed with numerous examples of separs. of 2 or 3 components. 10 references. G. M. Kosolapoff

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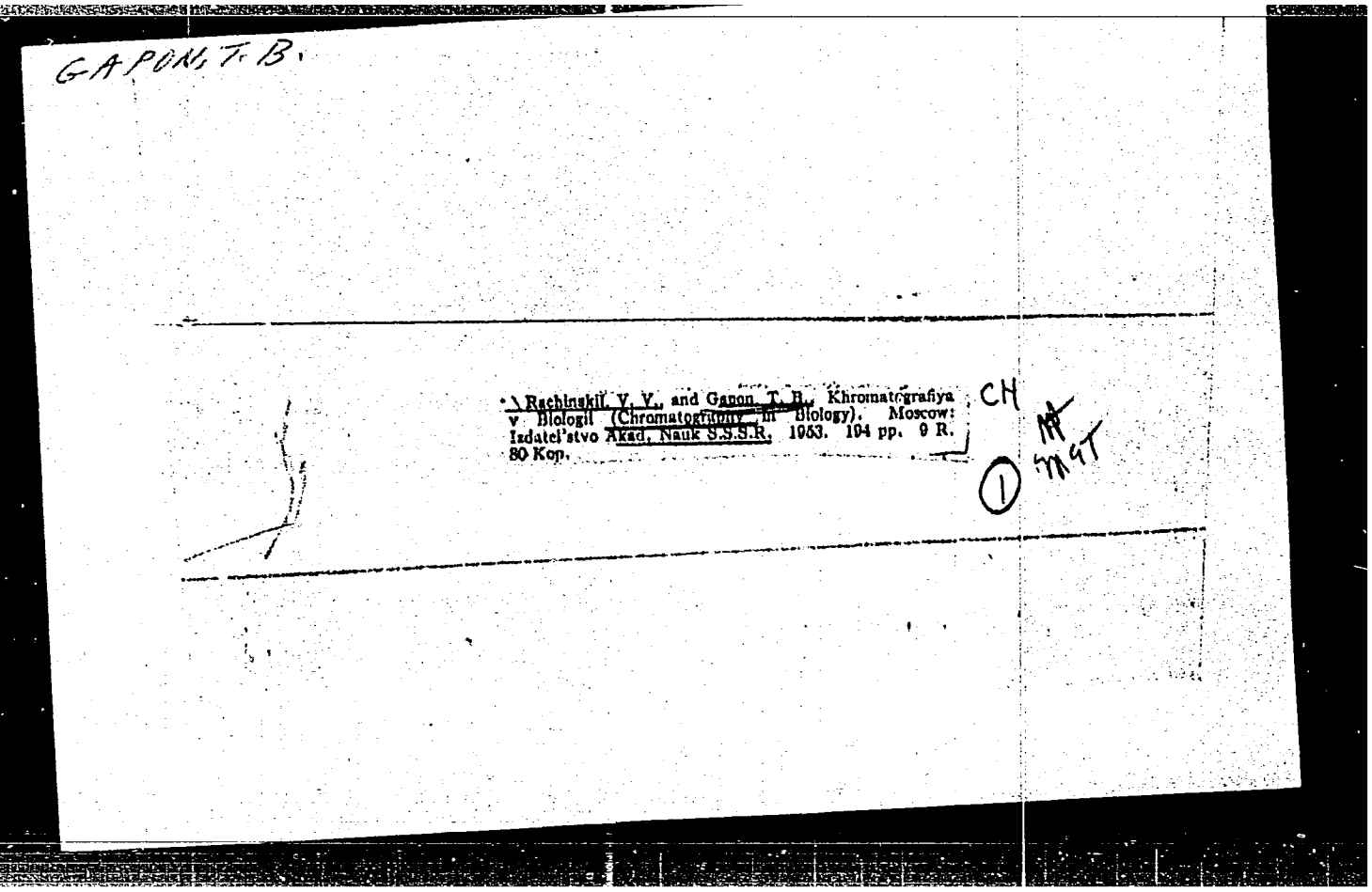
[Research in the field of chromatography transactions of the All-Union Conference on Chromatography, November 21-24, 1950] Issledovaniia v oblasti khromatografii; trudy Vsesoiuznogo soveshchaniia po khromatografii, 21-24 noiabria 1950 g. Moskva, Izd-vo Akademii nauk SSSR, 1952. 225 p. (MLRA 6:5)

1. Akademiya nauk SSSR. Otdelenie khimicheskikh nauk.
(Chromatographic analysis)



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Rachinskiĭ, V. V., and Gapon, T. B., Khromatografiya v Biologii (Chromatography in Biology). Moscow: Izdatel'stvo Akad. Nauk S.S.S.R. 1953. 194 pp. 9 R. 80 Kop.

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GAPON, T. B.

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CSO: 1743-N

THEORY AND PRACTICE OF THE APPLICATION OF ION-EXCHANGE MATERIALS

K. V. Chmutov

Teoriya i Praktika Primeneniya Ionoobmennykh Materialov, Moscow, 1955, pp 1-164.

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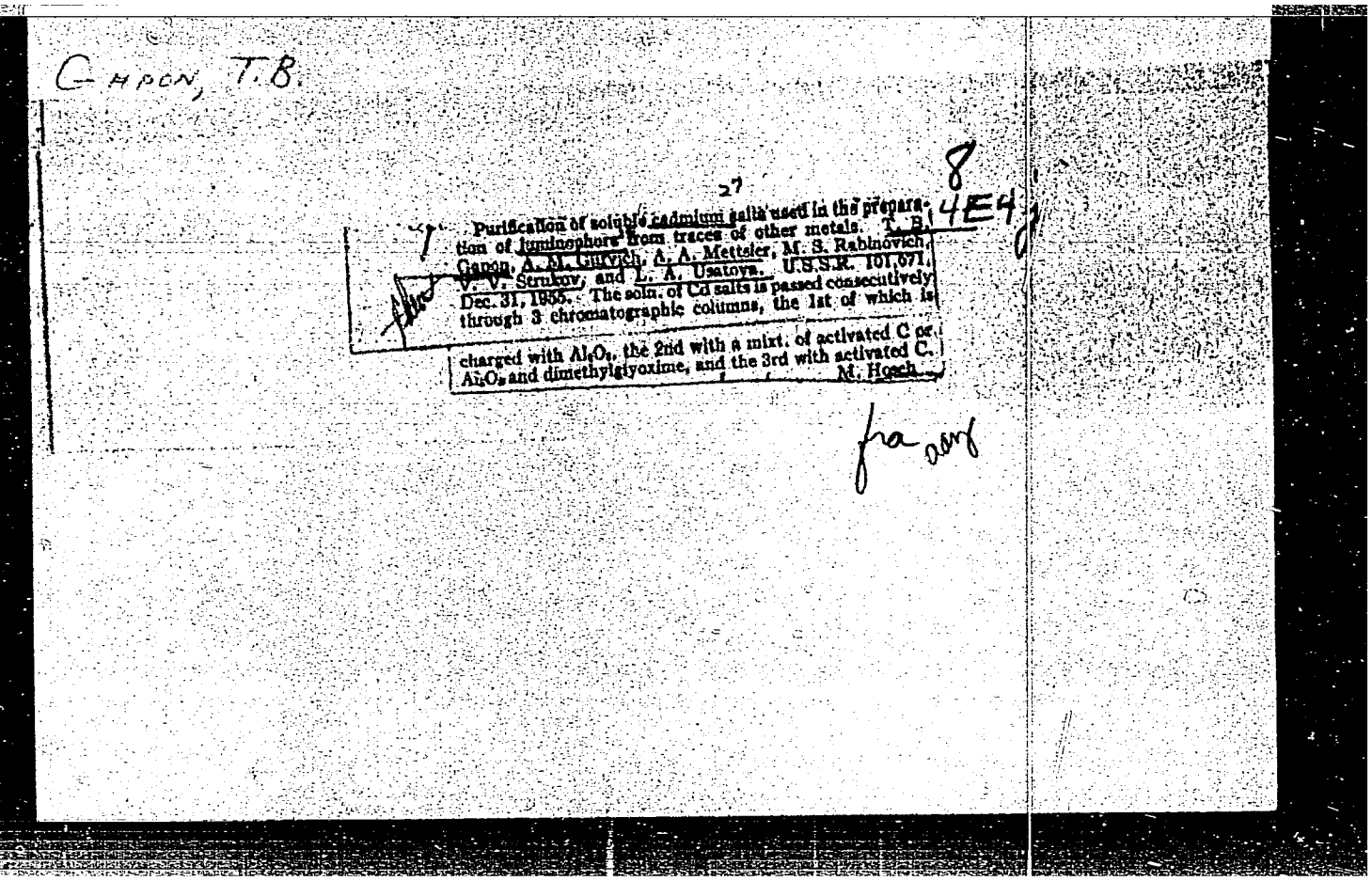

GAPON, T.B.

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Purification of soluble cadmium salts used in the preparation of luminophors from traces of other metals. T. B. Gapon, A. Sh. Gitkych, A. A. Mettsler, M. S. Rabinovich, V. V. Strukov, and L. A. Usatova. U.S.S.R. 101,671, Dec. 31, 1955. The soln. of Cd salts is passed consecutively through 3 chromatographic columns, the 1st of which is charged with Al_2O_3, the 2nd with a mixt. of activated C or Al_2O_3 and dimethylglyoxime, and the 3rd with activated C. M. Hoech

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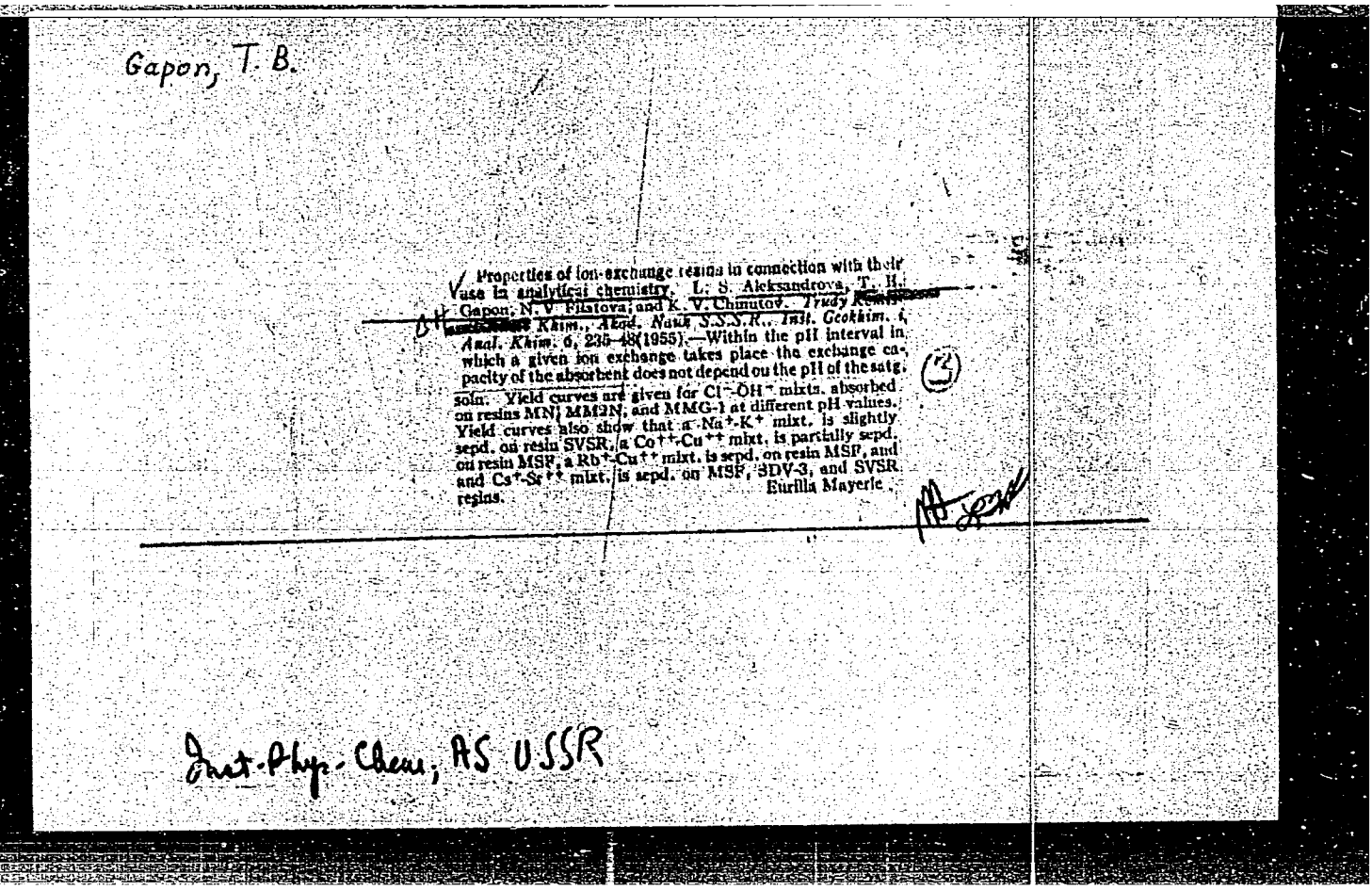

Gapon, T. B.

Properties of ion-exchange resins in connection with their use in analytical chemistry. L. S. Aleksandrova, T. B. Gapon, N. V. Filatova, and K. V. Chmutov. *Trudy Komis. Khim., Akad. Nauk S.S.S.R., Inst. Geokhim. i Anal. Khim.* 6, 238–48(1955).—Within the pH interval in which a given ion exchange takes place the exchange capacity of the absorbent does not depend on the pH of the satg. soln. Yield curves are given for Cl^--OH^- mixts. absorbed on resins MN, MM2N, and MMG-1 at different pH values. Yield curves also show that a Na^+-K^+ mixt. is slightly sepd. on resin SVSR, a Co^{++}-Cu^{++} mixt. is partially sepd. on resin MSP, a Rb^+-Cu^{++} mixt. is sepd. on resin MSP, and and Cs^+-Sr^{++} mixt. is sepd. on MSP, SDV-3, and SVSR resins.

Eurilla Mayerle

Inst-Phy-Chem, AS USSR

GAPON, T. B.

Chem.

873. Apparatus for measuring the rate of flow of solutions in laboratory chromatographic columns. K. V. Chmutov, T. B. Gapon and M. D. Vasilevich (Inst. Phys. Chem., Acad. Sci., Moscow). *Zavod. Lab.*, 1955, **21** (5), 627–628.—Continuous registering of rates of flow of liquids in chromatographic columns over the range 1 to 50 ml per min. is effected by means of a simple home-made rotameter, the construction of which is described and illustrated.

G. S. SMITH

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GAPON, T.B.

Chem

Chromatographic (selective adsorption) methods of thoroughgoing purification of zinc and cadmium salts for phosphors manufacture. A. M. Gurvich, T. B. Gapon, and M. S. Rubinovich. *Khim. Prom.* 1956, 31-4. Cd salts were purified by selective adsorption from Fe and Cu salts by running the soln. through a column of Al_2O_3. The Fe concn. in the purified product was 0.2-0.3 parts, of Cu <0.1 p.p.m. of the anhydrous product. A selective adsorption method for the purification of Zn salts was developed by using an adsorbent composed of a mixt. of Al_2O_3 and ZnO and of Al_2O_3 + ZnS. The residual Fe concn. with the first adsorbent was 0.1-0.3, with both adsorbents, the residual Cu <0.01 p.p.m. A selective adsorption method for the purification of Cd, Zn, and alkali-oxide metals was based on the adsorbent composed of C + dimethylglyoxime, with the final concns. of Fe 0.2-0.4, Cu ≤0.01, and Co about 0.5 p.p.m. No Ni could be detected in the product by chem. tests. The methods of purification of Cd and Zn salts were used in the prepn. of (Cd,Zn)S.Ag phosphors, and the products obtained were not inferior to any purified by chem. means. The prepn. details are given for the new adsorbents. W. M. Sternberg

GAPON, T. B

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Purification of soluble zinc and cadmium salts. T. B. Gapon, A. A. Mettsler, M. S. Rabinovich, E. I. Strukova, V. V. Strukov, and E. A. Usatova. U.S.S.R. 105,942, June 25, 1957. Addn. to U.S.S.R. 99,924. For prepn. of phosphors, solns. of Zn and Cd salts are passed through a cation-exchange column and then through a column charged with dimethylglyoxime and activated C. M. Hosch

SOV/137-58-9-18822

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 9, p 95 (USSR)

AUTHORS: Gurvich, A.M., Gapon, T.B.

TITLE: Prospects for the Utilization of the Adsorption-complex-forming Method of Chromatography to Purify Solutions in Zinc Hydrometallurgy (Perspektivy primeneniya adsorbtsionno-kompleksoobrazovatel'nogo khromatograficheskogo metoda dlya ochistki rastvorov v gidrometallurgii tsinka)

PERIODICAL: V sb.: Materialy Soveshchaniya po primeneniyu ionnogo obmena v tsvetn. metallurgii. Moscow, 1957, pp 91-101

ABSTRACT: An examination is made of the possibility of employing a chromatographic method of purifying solutions of $ZnSO_4$ and $CdSO_4$ in columns containing carbon and dimethylglioxime and carbon and α-nitroso - β-naphthol. Removal of Ni, Co, Cu, and Fe from the solutions results from the fixing of these cations by dimethylglyoxime (or α-nitroso - β-naphthol) in stable complexes adsorbed by carbon. The mixture of dimethylglyoxime and coal is prepared in a 1:10 ratio. Each gram of this sorbent is capable of removing the Fe, Cu, and Ni from 250 g $CdSO_4 \cdot 8/3\ H_2O$ and >600 g $ZnSO_4 \cdot 7H_2O$. The working

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