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Number 75

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<u>Title</u>	<u>Issue</u>	<u>Date</u>
<u>Russian Periodicals</u>		
Arkhiv Patologii (Archive of Pathology) Cards 1, 71-76	Vol X	No 3 May/June 1948
Klinicheskaya Meditsina (Clinical Medicine) Cards 47, 57	Vol XXVI	No 5 May 1948
Meditsinskaya Sestra (Medical Nurse) Cards 55-56		No 5 May 1948
Promyshlennaya Energetika (Industrial Energetics) Cards 25-29, 37		No 5 May 1948
Sovetskaya Meditsina (Soviet Medicine) Cards 48-54, 58-70		No 4 Apr 1948
Sovetskoye Zdravookhraneniye (Soviet Public Health) Cards 77-84		No 2 Mar/Apr 1948
Stanki i Instrument (Machine Tools and Instruments) Cards 36, 43-46		No 1* Jan 1948
Torfyanaya Promyshlennost' (Peat Industry) Cards 42, 91-92		No 5 May 1948
Uspekhi Khimii (Progress of Chemistry) Card 2	Vol XVII	No 1 Jan/Feb 1948
Vestnik Elektro-Promyshlennost' (Herald of the Electrical Industry) Cards 33, 35		No 5 May 1948
Zavodskaya Laboratoriya (Factory Laboratory) Cards 3-7, 30, 38-40, 85-90	Vol XIV	No 5 May 1948
Zhurnal Analiticheskoy Khimii (Journal of Analytical Chemistry) Cards 8-16	Vol III	No 3 May/June 1948
Zhurnal Prikladnoy Khimii (Journal of Applied Chemistry) Cards 17-24	Vol XXI	No 4 Apr 1948

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Journal Tekhnicheskoy Fiziki (Journal of Technical Physics) Vol XVIII No 5 May 1948
 Cards 31-32, 34, 41, 94-102

Chinese Periodical

K'o-hsueh Shih-pao (Science Monthly Bulletin) Vol XIV No 2** Aug 1947
 Card 93

NOTE

In indexing these abstracts the following guides are used: MEDICINE - "Quarterly Cumulative Index Medicus," American Medical Association; CHEMISTRY - "Chemical Abstracts Subject Index," American Chemical Society; GENERAL - "Subject Headings for Technical Libraries," US Department of Commerce, Office of Technical Services.

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USSR/Academy of Sciences Biography	May/June 1948	USSR/Academy of Sciences Biography	Jan/Feb 1948
"Aleksey Dmitriyevich Speranskiy (Sixtieth Year Since His Birth)," O. Ya. Ostriy, 11 pp		"Scientific Method of A. Ye. Arbuzov," A. I. Razumov, Kazan, 14 pp	
"Arkhiy Patologii" Vol X, No 3		"Uspekhi Khimii" Vol XVII, No 1	
Gives account of life and work of the well-known Leningrad surgeon. Among posts he has held are those of senior surgeon of First Medical Institute and senior post-mortem dissector at Army Medical Academy. Presents an excellent photograph.		Gives biographical sketch of Arbuzov in honor of his 45th year of scientific work. Lists 60 articles and books written by Arbuzov.	
FDB	75T1	FDB	75T2
USSR/Chemistry - Carbon Monoxide, Determination of, in Air Chemistry - Analysis	May 1948	USSR/Chemistry - Polarography Chemistry - Analysis	May 1948
"Determination of the Percentage of Carbon Monoxide in Air by Combustion in a Mars Furnace," A. G. Bogdanchenko, Chelyabinsk Metallurgical Plant, 2 pp		"Polarographic Maximum of the Second Type and Its Use in Analytical Chemistry, Part I," T. A. Kryukova, Inst Phy Chem, Acad Sci USSR, 7 pp	
"Zavod Lab" Vol XIV, No 5		"Zavod Lab" Vol XIV, No 5	
Carbon monoxide in air is burnt in a Mars furnace at 800-900° and carbon dioxide formed is absorbed in barium hydroxide, which is then titrated. Gives details of experiment. Results are in close agreement with those obtained by Reberg's method, which takes 1 1/2 hours and involves use of expensive and unstable iodic anhydride.		A polarographic maximum of second type occurs as a result of tangential movements of surface of a drop of mercury which take place as it leaves a capillary. Current of maximum depends on outlet speed of mercury from capillary and surface charge which in turn depends on potential and conductivity of solution.	
FDB	75T3	FDB	75T4
USSR/Chemistry - Polarography Chemistry - Dyes	May 1948	USSR/Chemistry - Polarography (Contd)	May 1948
"Polarographic Method of the Determination of Alpha-Nitronaphthalin in the Presence of Alpha-Naphthylamine," Yu. I. Vaynshteyn, Inst Org Intermediate Products and Dyestuffs, 2 pp		Usual analytic methods, both curve calibration and additive, are fully applicable, as in case of ordinary diffusion current. Relation between concentration of reducing substance and strength of current is a straight line.	
"Zavod Lab" Vol XIV, No 5			
Subject mixture is an important intermediate product in anilin dye industry. Describes in detail polarographic method of analysis. Tabulates relation between wave height and alpha-naphthalin concentration. Results have been checked by chemical analysis.			
FDB	75T5	FDB	75T4
USSR/Chemistry - Polarography, Instruments Chemistry - Analysis	May 1948	USSR/Chemistry - Colorimetry Chemistry - Minerals	May 1948
"Apparatus for Polarographic Analysis," D. A. Vyakhirev, 11 pp		"Color Reactions for Detecting Small Concentrations of Dissolved Mineral Salts," V. I. Kuznetsov, All-Union Inst of Mineral Raw Materials, 4 pp	
"Zavod Lab" Vol XIV, No 5		"Zavod Lab" Vol XIV, No 5	
Describes three types of polarographic apparatus: visual, photoregistering, and autographic. Odessa Model M-8, whose circuit diagram is reproduced, stands supreme in photoregistering class, but production of an autographic model is essential, as it is more convenient for mass production analysis. There is also need for a visual polarograph in which tedious trans-		Small concentrations (1:1,000,000 for calcium) of mineral salts in solution can be detected by adding suitable reagent and noting resulting color change, which varies according to class of metal. Examples of such reagents are 2-oxynaphthalin (1-azo-2)-naphthalin-1-sulfo acid, and stilbene-4,4'-bia	
FDB	75T6	FDB	75T7

RESTRICTED	FDB Periodical Abstracts Scientific No 75	RESTRICTED
USSR/Chemistry - Polarography, Instruments (Contd) May 1948	USSR/Chemistry - Colorimetry (Contd) May 1948	
cription of polarograms is avoided. Recommends continued research into application of oscillograph to polarography.	[(Azo-1) - 2-oxynaphthalin-2, 2'-disulfo acid], syntheses of which are described.	
FDB 75T6	FDB 75T7	
USSR/Chemistry - Boric Acid, Detection May/June 1948 Chemistry - Analysis, Qualitative	USSR/Chemistry - Analysis, Micro May/June 1948 Chemistry - Nitric Oxides, Formation of	
"New Qualitative Reaction for Boric Acid and Its Salts," A. P. Kreshkov and S.S. Vil'borg, Moscow Ord of Lenin Inst of Chem Tech imeni D. I. Mendeleev, 4 pp	"Quick Methods of Micro-Elementary Analysis," M. O. Korshun and B. A. Klimova, Lab of Org Microanalysis, Inst Org Chem, Acad Sci USSR, 4 pp	
"Zhur Analit Khimii" Vol III, No 3	"Zhur Analit Khimii," Vol III, No 3	
Describes reaction based on interaction of boric acid with ethyl orthosilicate or its isomers suitable for detection of small quantities of boric acid and its salts and several organic compounds of silicon. Reaction requires no complicated apparatus and is simple in execution. Submitted Jul 1947.	Deals with problem of formation of nitric oxides during determination of C-H in matter containing C, H, O, and N. Submitted Apr 1947.	
FDB 75T8	FDB 75T9	
USSR/Chemistry - Alkalinity, Determination of May/June 1948 Chemistry - Sulfonic Acids	USSR/Chemistry - Cyanide May/June 1948 Chemistry - Colorimetry	
"Alkalimetric Determination of Carbazole-3-Sulfo Acid," V. F. Borodkin and T. V. Mal'kova, Ivanovo Inst Chem Tech, 1 1/2 pp	"Colorimetric Determination of Cyanide With Picric Acid," D. N. Finkel'shteyn, Sverdlovsk Mining Inst imeni V. V. Vakhrushev, 8 pp	
"Zhur Analit Khimii" Vol III, No 3	"Zhur Analit Khimii" Vol III, No 3	
Describes simple and quick method of alkalimetric determination of carbazole-3-sulfo acid in presence of other polysulfonic acids. Submitted May 1947.	A reaction with picrate of sodium may be used for visual and objective colorimetric determination of a cyanide under certain conditions. Submitted Jul 1947.	
FDB 75T10	FDB 75T11	
USSR/Chemistry - Electrodes, Mercury May/June 1948 (Dropping) Chemistry - Electrodes, Mercury Capillary	USSR/Chemistry - Analysis, Quantitative May/June 1948 Chemistry - Cadmium, Analysis, Determination	
"Multicapillary Mercury Dropping Electrode," Ya. P. Gokhshteyn, Inst of Geochem and Analytical Chem, Acad Sci USSR, 3 pp	"The Use of Methyl Violet in Quantitative Analysis, Determination of Cadmium," M. A. Popov, Gen Lab, Western Siberia Geol Adm, Novosibirsk, 4 1/2 pp	
"Zhur Analit Khimii" Vol III, No 3	"Zhur Analit Khimii" Vol III, No 3	
Subject electrode was proposed for determining very small concentrations of reducible ions on a mercury dropping cathode. Shown that with use of electrode diffusion currents of reducible ions conform to Il'kovich equation. Submitted Jan 1948.	Describes new method for quantitative separation of cadmium with aid of methyl violet. Method is simple, gives completely satisfactory results, and is adaptable for mass operation. Submitted Jun 1947.	
FDB 75T12	FDB 75T13	

RESTRICTED	FDB Periodical Abstracts Scientific No 75	RESTRICTED
<p>USSR/Chemistry - Scandium, Analysis Chemistry - Pyridine</p> <p>May/June 1948</p> <p>"The Separation of Scandium With the Aid of Pyridine," E. A. Ostroumov, All-Union Inst of Mineral Raw Materials, Moscow, 8 pp</p> <p>"Zhur Analit Khimii" Vol III, No 3</p> <p>Reaction studied involved extraction of scandium hydroxide with aid of buffer solution composed of pyridine and its nitrate. Method may be used both in analytic chemistry for separation of scandium from rare earth metals and in inorganic chemistry for separation of scandium salts. Submitted Oct 1947.</p> <p>FDB 75T14</p>	<p>USSR/Chemistry - Magnesium, Separation of Chemistry - Calcium Oxalate</p> <p>May/June 1948</p> <p>"The Separation of Calcium From Magnesium. I. Verification of the Oxalate Method With a Radioactive Indicator," V. P. Shvedov, Leningrad State Ord of Lenin, Chair of Analytical Chem, 5½ pp</p> <p>"Zhur Analit Khimii" Vol III, No 3</p> <p>Data obtained show that magnesium precipitated with calcium oxalate is directly proportional to concentration of magnesium found in solution. Results of experiments conducted with aid of radioactive isotope</p> <p>FDB 75T15</p>	
<p>USSR/Chemistry - Analysis, Quantitative Chemistry - Alkali Metals</p> <p>May/June 1948</p> <p>"Method of Quantitative Determination of Haloids in Organic Compounds by the Reaction of an Alkali Metal in an Inert Solvent," A. K. Ruzhentseva and V. S. Letina, All-Union Sci Res Chem Pharm Inst imeni S. Ordzhonikidze, Moscow, 8 pp</p> <p>"Zhur Analit Khimii" Vol III, No 3</p> <p>Method proved satisfactory for determining chlorine and bromine with presence of both in an organic compound and for application to fluoro-organic compounds. Submitted Feb 1948.</p> <p>FDB 75T16</p>	<p>USSR/Chemistry - Magnesium, (Contd) Separation of</p> <p>May/June 1948</p> <p>of calcium show that quantity of magnesium going into CaC_2O_4 precipitate, and quantity of calcium precipitable together with MgNH_4PO_4 are notable. Submitted Jun 1947.</p> <p>FDB 75T15</p>	
<p>USSR/Chemistry - Xylenes Chemistry - Analysis, Spectrographic</p> <p>Apr 1948</p> <p>"Spectrographic Analysis of Mixtures of Isomeric Xylenes," Yu. V. Shostenko and A. Ye. Shtandel', 4½ pp</p> <p>"Zhur Priklad Khimii" Vol XXI, No 4</p> <p>Presents method for analyzing mixtures of o-, m- and p-Xylenes. Method is effective only when three isomers represent not less than 5% of substance being analyzed. Method is sufficiently accurate for any purpose to which it might be applied. Submitted 25 Oct 1947.</p> <p>FDB 75T17</p>	<p>USSR/Chemistry - Adsorption Chemistry - Photometry</p> <p>Apr 1948</p> <p>"Methods of Studying the Adsorption Curves of Solutions in the Ultraviolet Field," A. Ye. Shtandel', Khar'kov State Inst of Weights and Measuring Instruments, 10½ pp</p> <p>"Zhur Priklad Khimii" Vol XXI, No 4</p> <p>Presents new formula which will permit evaluation of errors occurring in nonideal sector of a photometric plate. Author obtained formula from studies of photographic plates exposed to light for short consecutive periods. Submitted 25 Oct 1947.</p> <p>FDB 75T18</p>	
<p>USSR/Chemistry - Electrodes, Iron Chemistry - Powder Metallurgy</p> <p>Apr 1948</p> <p>"Iron Powder Electrodes. I. The Effect of Dispersion and Composition of the Powder on the Properties of Iron Electrodes," L. L. Kuz'min and L. V. Borisova, Ivanovo Inst of Chem Tech, 9½ pp</p> <p>"Zhur Priklad Khimii" Vol XXI, No 4</p> <p>Describes studies conducted to determine properties of iron powder and relationship of its character to nature of its formation by reduction of iron oxides with hydrogen. Submitted 5 Mar 1947.</p> <p>FDB 75T19</p>	<p>USSR/Chemistry - Electrolysis Chemistry - Nickel Salts</p> <p>Apr 1948</p> <p>"The Meaning of the Second Potential in Nickel Salt Solutions," O. Kudra and Ye. Gitman, 6 pp</p> <p>"Zhur Priklad Khimii" Vol XXI, No 4</p> <p>Description of a visual method of determining I-V curve for various cathode current densities acting on nickel salt solutions. Clarifies reasons for chemical polarization in simple salt solutions, and explains role of anions in this process. Submitted 2 Jun 1947.</p> <p>FDB 75T20</p>	

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FDB Periodical Abstracts Scientific No 75

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USSR/Chemistry - Corrosion
Chemistry - Metals, Corrosion Apr 1948

"Temperature and Moisture Factors During the Corrosion of Metals in an Atmosphere of Sulfur Dioxide," O. V. Zarubina (deceased) and M. L. Turich, Gen Sci Res Lab of Hygiene and Sanitation for Routes of Transportation, Ministry of Pub Health USSR, 8 $\frac{1}{2}$ pp

"Zhur Priklad Khimii" Vol XXI, No 4

Temperature is most important factor in determining amount of corrosion of a surface. Greatest corrosion occurs in temperature range of 20-25° with a humidity of 80% or greater. Noticed that at temperatures of

FDB 75T21

USSR/Chemistry - Hydrogen Peroxide,
Generation of
Chemistry - Electrodes, Carbon,
Depolarization of Apr 1948

"The Generation of Hydrogen Peroxide in Alkali Carbon Elements in Depolarization in Air," Z. A. Iofa, N. B. Moiseyeva, S. Ya. Mirlina, Ye. Ye. Krymakova, Chair of Electrochemistry, Moscow State U, and Sci Res Elemental and Electrocarbon Inst, 12 pp

"Zhur Priklad Khimii" Vol XXI, No 4

Shows that atmospheric oxygen is absorbed during process of depolarization of carbon electrodes and

FDB 75T22

USSR/Chemistry - Corrosion (Contd) Apr 1948

30-35° there was no corrosion even with humidity of 80 to 90%. Submitted 7 May 1947.

FDB 75T21

USSR/Chemistry - Hydrogen Peroxide, (Contd) Apr 1948
Generation of

produces peroxides of hydrogen. Catalyst found which will be incorporated into mass of electrode, or used for coating electrode to prevent formation of peroxides in electrolyte. Results of experiments permitted conclusions to be drawn regarding reaction mechanism in depolarization in presence of a catalyst. Submitted 16 Oct 1947.

FDB 75T22

USSR/Chemistry - Storage Batteries
Chemistry - Lead Alloys, Antimony,
Corrosion of Apr 1948

"Effect of Impurities in a Lead-Antimony Alloy on the Work of the Grid of a Lead Storage Battery. I. Anode Corrosion of the Alloys," V. P. Mashovets and A. Z. Lyandres, Sci Res Battery Inst, 16 pp

"Zhur Priklad Khimii" Vol XXI, No 4

Pure lead is more corrosion resistant than lead-antimony alloy. Addition of silver to alloy rarely increases its corrosion resistance. Presents results of various other additions to alloy. Submitted 3 Mar 1947.

FDB 75T23

USSR/Chemistry - Electrolysis
Chemistry - Cathodes Apr 1948

"Cathodes With Reduced Hydrogen Liberation Potential," N. P. Fedot'yev, N. V. Berezina, Ye. G. Kruglova, Electrochem Lab, Leningrad Tech Inst, 12 pp

"Zhur Priklad Khimii" Vol XXI, No 4

Describes method which permits easy reduction of cathode potential. Studies of 15 common hydrocarbons and steel alloys did not give positive results in spite of wide variety of samples used. Attempts to determine proper method for preparing surfaces. Practical value of this series of experiments found

FDB 75T24

USSR/Electricity
Motors, Electric May 1948

"Combined Table of Asynchronous Motors of Three-Phase Current With Contact Rings," R. Ye. Gel'man, 1 p

"From Energet" No 5

An installment of a tabulated list of standard electric motors and their performances.

FDB 75T25

USSR/Chemistry - Electrolysis (Contd) Apr 1948

in possibility of determining length of operational use of a cathode under various operating conditions. Submitted 1 Oct 1947.

FDB 75T24

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<p>USSR/Electricity Furnaces, Electric Controls, Electric</p> <p>May 1948</p> <p>"Automatic Control of Electric Resistance Furnaces," V. V. Kudryavtsev, L. M. Ioffe, L. P. Shvalev, K. I. Glushkov, P. I. Selivanov, B. S. Popov, Plant imeni Molotov, Ministry of Armament, 1 p</p> <p>"Prom Energet" No 5</p> <p>Staff of above plant did not allow shortage of electric automatic controls to prevent increased output. Designed and installed a thermocouple-potentiometer type system, a circuit diagram of which is reproduced. Suggestion was awarded a fifth prize in All-Union competition.</p> <p>FDB 75T26</p>	<p>USSR/Electricity Furnaces, Electric Smelting</p> <p>May 1948</p> <p>"A New Method of Continuous Smelting of Various Kinds of Alloys in One Melting Furnace," V. M. Dudnik, Kirovsk Plant in the Urals, $\frac{1}{2}$ p</p> <p>"Prom Energet" No 5</p> <p>Previous practice required cleaning furnace before changing to different type of aluminum alloy. Shows this practice to be unnecessary, and gives figures showing resultant saving in electricity and increase in output. Suggestion was awarded a fifth prize in All-Union competition.</p> <p>FDB 75T27</p>	
<p>USSR/Electricity Furnaces, Electric Arc Regulators, Current</p> <p>May 1948</p> <p>"Automatic Control of a System of Arc Ore Heating Furnaces," Yu. Ye. Yefroyimovich, Cand Tech Sci, Lab of Automatics, MChM, 3 pp</p> <p>"Prom Energet" No 5</p> <p>After general discussion of subject author describes installation devised by his laboratory. Gives a complete circuit diagram.</p> <p>FDB 75T28</p>	<p>USSR/Electricity Power Supplies Electric Power Transmission</p> <p>May 1948</p> <p>"Individual Problems of Electrical Supply of Industrial Enterprises," S. M. Livshits, Engr, Gen Elec Installation MSPTI, 6 pp</p> <p>"Prom Energet" No 5</p> <p>Discusses whole field of power supply including following problems: energy losses, power factor, choice of current and voltage, supply to lighting installations, increasing reliability. Editor invites electrical workers' views on article.</p> <p>FDB 75T29</p>	
<p>USSR/Electricity Lamps, Mercury Lamps, Quartz</p> <p>May 1948</p> <p>"The Stability of Radiation of Mercury Quartz Lamps PRK-2 and PRK-4," D. A. Shklover, All-Union Elec Eng Inst, 3 pp</p> <p>"Zavod Lab" Vol XIV, No 5</p> <p>Working life of these lamps is 1000 hours. Describes measurements of relative power and wave lengths for various hours of service. Shows results graphically.</p> <p>FDB 75T30</p>	<p>USSR/Electricity Dielectrics, Solid Dielectrics - Losses</p> <p>May 1948</p> <p>"Plate Method for the Determination of Dielectric Permittivity and the Tangent of the Angle of Loss," I. A. El'tsin, Sci Res Inst of Phys, Moscow State U, 8 pp</p> <p>"Zhur Tekh Fiziki" Vol XVIII, No 5</p> <p>Paper gives strict theory of method for a thin plate situated in middle of a Lecher system. Formulas obtained are applied to calculation of dielectric permittivity and tangent of angle of loss (on a wave</p> <p>FDB 75T31</p>	
<p>USSR/Electricity Currents, Electric</p> <p>May 1948</p> <p>"Study of the Process of the Variation of Independent Currents in Gas," Z. P. Galkina and V. L. Granovskiy, All-Union Elec Eng Inst, Moscow, 16 pp</p> <p>"Zhur Tekh Fiziki" Vol XVIII, No 5</p> <p>Mercury vapor arc experiments show that increase of current in a constant gas medium requires a temporary increase in voltage and vice versa. If current change is caused by a rapid (10^{-7} sec) resistance change, temporary voltage change is represented by a steep rise to a sharp peak, and then a gradual fall. Peak</p> <p>FDB 75T32</p>	<p>USSR/Electricity (Contd)</p> <p>May 1948</p> <p>$\lambda = 336$ cm) of various solid dielectrics. Submitted to Zh. E.T.F. 27 Nov 1947. Submitted 26 Dec 1947.</p> <p>FDB 75T31</p>	

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<p>USSR/Electricity (Contd) May 1948</p> <p>voltage can be calculated simply; it depends on circuit parameters and their speed of alteration, as is confirmed by experiment. Time of fall is of order of 10^{-5} sec and depends on density of gas. Results show that in gases voltage change across discharge gap is primary cause of current change. Submitted 20 Jun 1947. Submitted after revision 10 Dec 1947.</p>	<p>USSR/Electricity May 1948</p> <p>Cranes, Electric Electric Power Transmission</p> <p>"Problems on the Type of Current and Voltage for Stationary Machines and Cranes in Metallurgy," S. M. Livshits, Engr, TsentroElektroMontazh, 6½ pp</p> <p>"Vest Elektro-Prom" No 5</p> <p>Describes economy factors, various power feeds to electric cranes and to stationary machinery, methods for selection of voltages, and methods for distribution of electrical power.</p>	
FDB 75T32	FDB 75T33	
<p>USSR/Electronics May 1948</p> <p>Oscillators, Transitron Oscillations - Relaxation</p> <p>"Study of a Relaxation Oscillator of the Transitron Type," V. V. Migulin and T. N. Yastrebtsova, Sci Res Inst of Phys, Moscow State U, 12 pp</p> <p>"Zhur Tekh Fiziki" Vol XVIII, No 5</p> <p>Reports experimental study of transitron characteristics of 6Zh7 tube, and various performances of RS-oscillator working on this tube. Qualitative examination of processes in a similar system gives results in agreement with experiment. Submitted 24 Nov 1947.</p>	<p>USSR/Electronics May 1948</p> <p>Circuits, Electronic Voltage Regulators</p> <p>"Highly Stable Diode Tubes in Automatic and Regulating Circuits," G. R. Gertsenberg, Cand Tech Sci, All-Union ElektroTekh Inst imeni V. I. Lenin, 7 pp</p> <p>"Vest Elektro-Prom" No 5</p> <p>Gives voltage regulators for AC and DC circuits, amplitude regulator, current and voltage relays, and graphical methods for calculations of circuits with aid of a 4TSM diode.</p>	
FDB 75T34	FDB 75T35	
<p>USSR/Electronics Jan 1948</p> <p>Regulators, Electronic Circuits, Electronic</p> <p>"Electronic Instrument for Automatic Control of Machinery by Power Regulation," A. A. Bulgakov, Cand Tech Sci, and G. N. Alyab'yeva, Engr, 6½ pp</p> <p>"Stanki i Instrument" No 1</p> <p>Describes electron-thatron power supply for machinery and circuits used in automatic regulation. Method described can be applied to all types of machines. Circuits are based on the feed-back principle, which greatly facilitates regulating operation.</p>	<p>USSR/Engineering May 1948</p> <p>Furnaces, Gas Fuel Conservation</p> <p>"Gas Flameless Heating in Factory Furnaces," V. S. Gavripenko, 2 pp</p> <p>"Prom Energet" No 5</p> <p>Describes subject furnace with aid of two sectional elevations. Attempts to show by means of numerical examples that operating costs are lower than those of an electric furnace.</p>	
LC 75T36	FDB 75T37	
<p>USSR/Engineering May 1948</p> <p>Governors Laboratory Equipment</p> <p>"A New Laboratory Rheometer," V. A. Prokrovskiy, 1 p</p> <p>"Zavod Lab" Vol XIV, No 5</p> <p>Describes construction of rheometer with sketch. It is more compact than usual U-type and, since all parts are glass, can be used for any gas except HF.</p>	<p>USSR/Engineering May 1948</p> <p>Thermocouples Metallurgical Industry</p> <p>"New Construction of a Tungsten-Graphite Thermocouple" P. A. Shchukin and L. V. Pegushina, Inst of Metal, Acad Sci USSR, 1 p</p> <p>"Zavod Lab" Vol XIV, No 5</p> <p>Limited application of tungsten-graphite thermocouples is due to oxidation of tungsten at high temperatures. Author's design avoids this by enclosing a spiral of tungsten wire inside a graphite tube. This type of thermocouple is suitable for measuring temperatures from 1200° to 1700°.</p>	
FDB 75T38	FDB 75T39	

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<p>USSR/Engineering Turbines, Steam Turbines - Blades</p> <p>May 1948</p> <p>"The Use of a Styloscope for the Analysis of Parts of Steam Turbines," V. I. Volkov, Leningrad Metal Plant imeni I. V. Stalin, 1 p</p> <p>"Zavod Lab" Vol XIV, No 5</p> <p>Describes use of a styloscope for analyzing rivets securing blades of a finished steam turbine rotor. Difficulty of wheels that were close together and rivets far from perimeter of the wheel, consequently inaccessible to a portable styloscope, was overcome by using stationary styloscope with special attachment described.</p> <p>FDB 75T40</p>	<p>USSR/Engineering Viscosity Earth - Analysis</p> <p>May 1948</p> <p>"Experimental Study of the Vibroviscosity of Earth," D. D. Borkan, 6 pp</p> <p>"Zhur Tekh Fiziki" Vol XVIII, No 5</p> <p>Conservatism, which reigns in construction of foundations for buildings, is due to insufficient study of properties of earth. Describes results of experiments to determine effect of (a) vibration (b) moisture on viscosity of earth. Viscosity was determined by Stoke's method for thick liquids, i.e.,</p> <p>FDB 75T41</p>	
<p>USSR/Engineering Peat Industry Mechanization</p> <p>May 1948</p> <p>"Summation of Work of the Peat Industry for 1947 and Problems for 1948," A. F. Bausin, Deputy Minister of Electrostations USSR, 4 pp</p> <p>"Torf Prom" No 5</p> <p>Shows production figures for 1947, and results obtained from introduction of mechanization into this industry. Discusses tasks facing industry for 1948 and briefly suggests how these assignments will be met.</p> <p>FDB 75T42</p>	<p>USSR/Engineering (Contd)</p> <p>May 1948</p> <p>measurement of force required to sink a metal ball in sample. Shows results graphically. Submitted 18 Nov 1947.</p> <p>FDB 75T41</p>	
<p>USSR/Engineering Tools, Machine Machines, Grinding</p> <p>Jan 1948</p> <p>"Grinding the Gaps in Cylindrical Gears," N. P. Chapayev, Engr, Stank In Prom, 4 1/2 pp</p> <p>"Stanki i Instrument" No 1</p> <p>Quality of gears depends upon their grinding after heat treatment. Briefly presents some of factors which permit obtaining of high-quality gears.</p> <p>LC 75T43</p>	<p>USSR/Engineering Tools, Machine Machines, Milling</p> <p>Jan 1948</p> <p>"Pneumatic Semiautomatic Machine Tool for Cutting Grooves in Thin-Walled Parts," P. G. Belyayev and G. P. Mishurinskikh, 1 p</p> <p>"Stanki i Instrument" No 1</p> <p>Describes semiautomatic pneumatic machine designed to replace obsolete method of using a horizontal miller for notching thin walled parts. New machine is easier to operate and cuts production time to 1/16 of time required for notching by milling method.</p> <p>LC 75T44</p>	
<p>USSR/Engineering Tools, Machine Profilometers</p> <p>Jan 1948</p> <p>"The Profilometer, an Instrument for Determining the Quality of Surfaces," N. A. Kogan, 1 p</p> <p>"Stanki i Instrument" No 1</p> <p>Describes profilometer designed by author to be used for determining quality of internal and external surfaces, and evaluating their quality in accordance with GOST 2789-45. Simple in design, it can be used in laboratory or in factory. Photographic representation of assembled instrument.</p> <p>LC 75T45</p>	<p>USSR/Engineering Tools, Machine Austenite</p> <p>Jan 1948</p> <p>"Using High-Speed Steel Tools for Turning Type EI69 Austenite Steel," N. N. Zorev, Cand Tech Sci, 4 pp</p> <p>"Stanki i Instrument" No 1</p> <p>Discusses selection of proper geometric parameters for cutting tools, conditions for cutting, and type of cooling liquid that permits greater efficiency during turning of austenite steel. Great importance is attached to front and rear angles of operating tool. Gives formula for determining cutting performance of high-speed steel on austenite steel.</p> <p>LC 75T46</p>	

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<p>USSR/Medicine - Blood Pressure, High Medicine - Blood Pressure, Effect of Drugs on</p> <p>May 1948</p> <p>"Treatment of Hypertonic Diseases With Sulfocyanate," F. A. Lokshina, Therapeutic Clinic of Med Faculty, Second Moscow Med Inst imeni I. V. Stalin, 5 pp</p> <p>"Klinicheskaya Meditsina" Vol XXVI, No 5</p> <p>Data from observations indicate that sulfocyanate compounds are definitely an effective therapeutic agent for hypertonic diseases.</p> <p>FDB 75T47</p>	<p>USSR/Medicine - Parasiticoes Medicine - Vagina, Inflammation</p> <p>Apr 1948</p> <p>"Phytoncoidic Therapy for Trichomonal Colpitis," Prof A. M. Foy and M. V. Alekseyeva, First Leningrad Med Inst and Lab of Dynamics of Development of Organisms, Leningrad Inst of Experimental Med, 1½ pp</p> <p>"Sov Meditsina" No 4</p> <p>Discusses briefly research conducted which led to selection of phytoncides for treatment of patients suffering from trichomonal colpitis.</p> <p>FDB 75T48</p>
<p>USSR/Medicine - Parasiticoes, Admini- stration and Dosage Medicine - Parasiticoes, Properties</p> <p>Apr 1948</p> <p>"Phytoncides," Ye. Yu. Shass, Moscow, 1½ pp</p> <p>"Sov Meditsina" No 4</p> <p>Brief account of discovery, research and application of phytoncides--plant bactericides.</p> <p>FDB 75T49</p>	<p>USSR/Medicine - Malaria, Control Medicine - Malaria, Therapy</p> <p>Apr 1948</p> <p>"Organization of Medical Assistance for Malarial Patients in Cities," A. I. Yakusheva, Organized Epidemiological Sector, Inst of Malaria, Med Para- sitol, and Helminthol, Acad Med Sci USSR, 2½ pp</p> <p>"Sov Meditsina" No 4</p> <p>Describes organization, which was built up during the war, to help control malaria in cities and offer medical aid to those afflicted with malaria.</p> <p>FDB 75T50</p>
<p>USSR/Medicine - Malaria, Control Medicine - Mosquitoes, Control</p> <p>Apr 1948</p> <p>"Results of the Extensive Use of Preparations of Pentachlorine in the Control of Malaria," V. A. Nabokov, Entomological Sector, Inst of Malaria, Med Parasitol, Helminthol, Acad Med Sci USSR, 1 p</p> <p>"Sov Meditsina" No 4</p> <p>Discusses results of work conducted at Orekhov malaria station to determine effectiveness of DDT as disinfectant for large areas in malaria-infested regions.</p> <p>FDB 75T51</p>	<p>USSR/Medicine - Malaria, Control Medicine - Malaria, Transmission</p> <p>Apr 1948</p> <p>"Reasons for the Increase of Malarial Cases During the Hay Harvest," M. I. Karachunskaya, Sec Malaria Control, Antiepidemiological Adm, Ministry of Pub Health RSFSR, 1½ pp</p> <p>"Sov Meditsina" No 4</p> <p>Reasons for increased malaria cases during hay harvest season were traced to presence of itinerant workers who came from Voronezh Oblast, a region where malaria is prevalent. Describes measures adopted to control spread of malaria.</p> <p>FDB 75T52</p>
<p>USSR/Medicine - Dysentery, Diagnosis Medicine - Dysentery, Prevention</p> <p>Apr 1948</p> <p>"The Role of Diagnostic Stations in the Control of Dysentery," N. F. Blyumel', Chair of Epidemiology, First Moscow Ord of Lenin Med Inst, 2 pp</p> <p>"Sov Meditsina" No 4</p> <p>Describes value of diagnostic stations in determining sources of dysenteric infection, thus permitting more effective countermeasures to control it.</p> <p>FDB 75T53</p>	<p>USSR/Medicine - Malaria, Therapy Medicine - Lambliasis, Therapy</p> <p>Apr 1948</p> <p>"Review of 'Atabrin and Its Widespread Use in Malaria and Lambliosis' by S. I. Ashbel'," Prof I. A. Kassir- skiy, 1 p</p> <p>"Sov Meditsina" No 4</p> <p>Monographic presentation of various problems connected with use of atabrin for treatment of malaria and lambliosis. Critic states that second printing of book should contain more concrete examples of achievements and less bibliographical notes.</p> <p>FDB 75T54</p>

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<p>USSR/Medicine - Dysentery, Prevention Medicine - Dysentery, Therapy</p> <p>May 1948</p> <p>"Dysentery," S. Ya. Bakhmutskaya, Cand Med Sci, 4$\frac{1}{2}$ pp</p> <p>"Med Sestra" No 5</p> <p>Discusses nature of disease, sources of infection and some of accepted methods used in its treatment and control.</p> <p>FDB 75T55</p>	<p>USSR/Medicine - Fungi, Transmission Medicine - Children, Diseases</p> <p>May 1948</p> <p>"Prophylaxis of Fungus Diseases in Children," I. S. Liberman, Cand Med Sci, 2 pp</p> <p>"Med Sestra" No 5</p> <p>Describes various fungus diseases common in children. Warns that due to easy transmission of infection patients must be isolated. Discusses sanitation measures to control spread of fungus diseases.</p> <p>FDB 75T56</p>	
<p>USSR/Medicine - Cancer, Diagnosis Medicine - Stomach, Secretion</p> <p>May 1948</p> <p>"Diagnostic Value of Total Acidity of Gastric Content in Cancer of the Stomach," Prof A. G. Gukasyan, Faculty Clinic, Sanitation and Hygienics Faculty, Moscow Ord of Lenin Med Inst, 6 pp</p> <p>"Klinicheskaya Meditsina" Vol XXVI, No 5</p> <p>In cancer diagnosis discrepancy between total acidity and amount of free hydrochloric acid is of great importance. A great range between the two should be suspected of indicating cancer of stomach.</p> <p>FDB 75T57</p>	<p>USSR/Medicine - Penicillin Medicine - Empyema</p> <p>Apr 1948</p> <p>"Use of Penicillin in Pleural Empyema," Prof A. G. Gukasyan, Faculty Therapeutical Clinic, Sanitation Hygienic Faculty, First Moscow Ord of Lenin Med Inst, 3 pp</p> <p>"Sov Meditsina" No 4</p> <p>Penicillin is an effective therapeutic agent in subject disease. Treatment is most effective when given in early stage of empyema. Effective amount of penicillin for cure varies between three million and nine million units. There are no aftereffects in penicillin therapy.</p> <p>FDB 75T58</p>	
<p>USSR/Medicine - Wounds, Gunshot Medicine - Penicillin</p> <p>Apr 1948</p> <p>"Novocaine-Penicillin Injections as a Means of Primary Surgical Treatment of Wounds and Treatment of Suppurative Wounds," M. F. Bogatyrev, Nth Cen Clinical Mil Hosp, 1 p</p> <p>"Sov Meditsina" No 4</p> <p>Penicillin was administered in various ways for treatment of gunshot wounds. Describes briefly successes obtained from use of combined novocaine-penicillin injections for wounds. Same method was applied to suppurative wounds.</p> <p>FDB 75T59</p>	<p>USSR/Medicine - Scarlet Fever Medicine - Penicillin</p> <p>Apr 1948</p> <p>"Treatment of Scarlet Fever With Penicillin," E. A. Gal'perin, Moscow, 2 pp</p> <p>"Sov Meditsina" No 4</p> <p>Discusses results obtained from studies on some 800 scarlet fever cases treated by many methods. Penicillin therapy was found to be most effective; although not considered a specific therapy, it can be considered a pathogenetic therapy.</p> <p>FDB 75T60</p>	
<p>USSR/Medicine - Penicillin, Therapy Medicine - Penicillin, Administration and Dosage</p> <p>Apr 1948</p> <p>"Methods in Using Penicillin," Prof V. V. Babuk, Chair of Gen Surg, Minsk Med Inst, 1 p</p> <p>"Sov Meditsina" No 4</p> <p>Frequent administrations of penicillin cause patient unrest and are unsatisfactory for patients suffering from severe diseases. Briefly describes a recommended method for application of penicillin.</p> <p>FDB 75T61</p>	<p>USSR/Medicine - Dysentery, Bacilli Medicine - Drugs</p> <p>Apr 1948</p> <p>"Effectiveness of Gramicidin When Administered in Conjunction With Sulfonamide Preparations in the Treatment of Bacillary Dysentery," A. I. Daldina and I. A. Kozlov, Clinical Sector, Inst of Malaria, Med Parasitol and Helminthol, Acad Med Sci USSR, and Sec on Infection, Bakinsk Garrison Hosp, No 370, 2pp</p> <p>"Sov Meditsina" No 4</p> <p>Use of combined treatment greatly speeds up recovery. Gramicidin C also speeds up regeneration and epithelization of dysenteric ulcers in kidneys. There are no adverse aftereffects from administration of Gramicidin C.</p> <p>FDB 75T62</p>	

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<p>USSR/Medicine - Dysentery Medicine - Convalescence</p> <p>Apr 1948</p> <p>"Questions of the Practical Value of the Recto- manoscope in Dysentery," Maj M. I. Bryakin, Med Sv, Nth Field Hosp, 1½ pp</p> <p>"Sov Meditsina" No 4</p> <p>Subject method permits better estimation of degree of recovery of patient during convalescence.</p>	<p>USSR/Medicine - Malaria, Diagnosis Medicine - Malaria, Therapy</p> <p>Apr 1948</p> <p>"Erroneous Diagnosis and Medical Treatment for Malaria," Prof Ye. M. Tareyev, Moscow, Hon Worker of Sci, 5 pp</p> <p>"Sov Meditsina" No 4</p> <p>Emphasizes necessity for proper interpretations of malarial indications and some of more effective methods which have been employed in controlling this disease.</p>	
FDB	75T63	FDB 75T64
<p>USSR/Medicine - Malaria, Therapy Medicine - Malaria, History</p> <p>Apr 1948</p> <p>"Evaluation of the Effectiveness of Modern Treatment of Malaria," Prof B. Ya. Padalka, Kiev, Clinic of Infectious Diseases, Kiev Inst for Advancement of Doctors, 2 pp</p> <p>"Sov Meditsina" No 4</p> <p>Results in evaluating effectiveness of modern methods treating malaria collected during 1944-1946 by Kiev Malaria Organization. Data applies to mass treatment of malarial cases in Kiev and surrounding areas.</p>	<p>USSR/Medicine - Malaria, History Medicine - Medicine, Military</p> <p>Apr 1948</p> <p>"Varied Clinical Course of Malaria in World War II," Ye. S. Glikberg, Cand Med Sci, Therapeutical Clinic, Odessa Inst for Advancement of Doctors, 2 pp</p> <p>"Sov Meditsina" No 4</p> <p>Presents results of observations carried out during 1943-1944 on various clinical courses in malarial patients of First Ukrainian Army Group and Voronezh Oblast.</p>	
FDB	75T65	FDB 75T66
<p>USSR/Medicine - Malaria, Quartan Medicine - Liver, Function Tests</p> <p>Apr 1948</p> <p>"The Hepatic Function in Quartan Malaria," A. V. Vinogradov, Clinical Sec, Inst of Malaria, Medical Parasitol, and Helminthol, Acad Med Sci USSR, 2 pp</p> <p>"Sov Meditsina" No 4</p> <p>Presents results of studies conducted on some 33 cases to determine hepatic function in malaria. Data can- not be accepted as conclusive and reliable.</p>	<p>USSR/Medicine - Malaria Medicine - Transfusion</p> <p>Apr 1948</p> <p>"Question of Malaria and Transfusion," N. M. Zhukov, Moscow Oblast Malaria Sta, Inst imeni Mechnikov, ½ p</p> <p>"Sov Meditsina" No 4</p> <p>Reports cases observed of transfer of malaria to children through blood transfusions from donors who at one time had been afflicted by malaria.</p>	
FDB	75T67	FDB 75T68
<p>USSR/Medicine - Malaria Medicine - Drugs, Effects</p> <p>Apr 1948</p> <p>"Atabrin Psychosis," N. Ye. Yarygin and N. I. Nagibina, Babent Regional Hosp, Bukhar Oblast, Uzbek SSR, 1½ pp</p> <p>"Sov Meditsina" No 4</p> <p>Therapeutic doses of atabrin are excellent medicinal means for controlling malaria. However atabrin affects nervous system and builds up internal resistance to itself. Heavy doses of atabrin bring about a con- dition of intoxication and often result in severe psychosis.</p>	<p>USSR/Medicine - Syphilis Medicine - Penicillin</p> <p>Apr 1948</p> <p>"Some Results of the Treatment of Syphilis by Peni- cillin," Prof N. S. Vedrov, Moscow, 2 pp</p> <p>"Sov Meditsina" No 4</p> <p>Data for article was collected by group of physicians who operated a field base of Moscow City Public Health Department, conducting tests over period of 3 years. Actual results were obtained from treatment of new cases of syphilis. Concludes that penicillin is best antisyphilitic substance now known.</p>	
FDB	75T69	FDB 75T70

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<p>USSR/Medicine - Anatomy Medicine - Respiratory Tract</p> <p>May/June 1948</p> <p>"Review of 'Pathological Anatomy. Part III. Respiratory Organs' by A. I. Abrikosov," Prof G. L. Derman</p> <p>"Arkhir Patologii" Vol X, No 3</p> <p>Favorable review of above work. Treats in detail pathological anatomy of diseases of nose, larynx, trachea, bronchi, lungs and pleura and gives valuable list of references. Published by Medgiz, 1947; includes 194 sketches.</p> <p>FDB 75T71</p>	<p>USSR/Medicine - Sarcoma, Experimental Medicine - Mice</p> <p>May/June 1948</p> <p>"Comparative Results of Intracutaneous and Subcutaneous Injections of Antireticular Cytotoxic Serum on the Growth of Transplanted Sarcoma in Mice," V. D. Vinogradova, Moscow Pathophysiol Dept, Gen Oncological Inst imeni P. A. Gertoena, 4 pp</p> <p>"Arkhir Patologii" Vol X, No 3</p> <p>Reports series of experiments performed by author on mice: intracutaneous, 85; subcutaneous, 79; control, 90. Positive results of sarcoma transplantation were $49.4 \pm 5.5\%$, $77.2 \pm 4.7\%$ and $92.2 \pm 2.8\%$, respectively. Intracutaneous injection, therefore, con-</p> <p>FDB 75T72</p>	
<p>USSR/Medicine - Diphtheria Medicine - Stomach, Examination</p> <p>May/June 1948</p> <p>"Histomorphological Diseases of the Mucous Membrane of the Stomach in Various Forms of Diphtheria," B. M. Nikitin, Moscow, Lab of Path Anat of Infectious Diseases, Inst of Normal and Path Morph, Acad Med Sci and Path Anat Dept Blagushinsk Hospital, 8 pp</p> <p>"Arkhir Patologii" Vol X, No 3</p> <p>Reports stomach examinations of 30 diphtheria cases, 3-4 hours after death. In nearly every case degeneration or inflammation of mucous membrane of stomach was observed, and in 11 cases, acute gastritis. Main</p> <p>FDB 75T73</p>	<p>USSR/Medicine - Sarcoma, Experimental (Contd)</p> <p>May/June 1948</p> <p>considerably lowers susceptibility of mice to sarcoma.</p> <p>FDB 75T72</p>	
<p>USSR/Medicine - Diphtheria (Contd)</p> <p>May/June 1948</p> <p>pathological processes in mucous membrane occur in first 2 weeks of diphtheria and then gradually disappear.</p> <p>FDB 75T73</p>	<p>USSR/Medicine - Poisons and Poisoning, Industrial Medicine - Autopsies</p> <p>May/June 1948</p> <p>"Data on the Pathological Anatomy of Acute Chlorine Poisoning," F. I. Pozhariskiy, Moscow, Chair of Path Anat, Gen Inst for Advancement of Doctors, 3 pp</p> <p>"Arkhir Patologii" Vol X, No 3</p> <p>Autopsy reports on two workmen who died from accidental chlorine poisoning. One was deflating balloons; other was cleaning a chlorine tank. It is claimed that results give a pathomorphological picture which differs considerably from that generally accepted.</p> <p>FDB 75T74</p>	
<p>USSR/Medicine - Refrigeration Medicine - Cold, Therapy</p> <p>May/June 1948</p> <p>"Further Modification of a Simplified Method of Freezing Histological Tissues," P. P. Popovitch, Chair of Path Anat, Yaroslavl Med Inst, 1 p</p> <p>"Arkhir Patologii" Vol X, No 3</p> <p>In "Arkhir Patologii" No 1 and 2, 1946, author described simplified method of freezing tissue specimens, using a freezing mixture of ice/snow and cooking salt instead of carbon dioxide. Present article describes modification of this apparatus which enables entire object to be cooled evenly. Apparatus has been placed in mass production.</p> <p>FDB 75T75</p>	<p>USSR/Medicine - Endocarditis Medicine - Rabbits</p> <p>May/June 1948</p> <p>"Experimental Endocarditis," V. P. Kesareva, Moscow, Chair of Path Anat, Smolensk Med. Inst, 6 pp</p> <p>"Arkhir Patologii" Vol X, No 3</p> <p>Reports experiments carried out on 83 rabbits. Animals were sensitized with four horse-serum injections at 5-day intervals. 10-15 days after last injection they were compelled to run for 10-15 minutes, whereupon a mixture of streptococci and horse-serum was injected into ear. 58% developed typical endocarditis. However, identical amounts of microbes frequently</p> <p>FDB 75T76</p>	

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<p>USSR/Medicine - Public Health, Progress Mar/Apr 1948 Medicine - Public Health, History</p> <p>"Public Health in the Bulgarian People's Republic," V. S. Grazhul', Cand Med Sci, Inst Public Health and History of Med, 4 pp</p> <p>"Sovetskoye Zdravookhraneniye" No 2</p> <p>Discusses state of public health in Bulgaria in 1944, when People's Democracy was established, and compares it with present day. Describes public health service with chart showing organization and gives account of progress of Five-Year Plan.</p> <p>FDB 75T77</p>	<p>USSR/Medicine - Endocarditis (Contd) May/June 1948</p> <p>produced completely different forms of endo- and myocarditis. Author discusses the reason for this. Article is illustrated with microphotographs.</p> <p>FDB 75T76</p>	
<p>USSR/Medicine - Hygiene and Sanitation Mar/Apr 1948 Medicine - Water, Supply</p> <p>"Republican Scientific Conference of Young Hygienists," D. Ye. Rozenberg, 2 pp</p> <p>"Sovetskoye Zdravookhraneniye" No 2</p> <p>Conference, first of its kind, was held in Moscow 9-10 Dec 1947 and 25 papers were read on water supply, food, atmosphere, soils, etc., some of which are summarized.</p> <p>FDB 75T78</p>	<p>USSR/Medicine - Public Health, Records Mar/Apr 1948 and Reports Medicine - Vital Statistics</p> <p>"Compiling Morbidity Rates for a Fluctuating Popu- lation," Ye. E. Ben, Chair of Pub Health, Inst for Advancement of Doctors, Leningrad, 5 pp</p> <p>"Sovetskoye Zdravookhraneniye" No 2</p> <p>B. S. Bessmertny discussed above problem in "Sovet- skoye Zdravookhraneniye" No 5, 1947. His article is criticized by Prof Ben, who points out certain in- consistencies in Bessmertny's figures. These are admitted by Bessmertny in his reply, but he remains convinced of theoretical soundness and practicability of his method.</p> <p>FDB 75T79</p>	
<p>USSR/Medicine - Vital Statistics Mar/Apr 1948 Medicine - Hygiene and Sanitation</p> <p>"The Planning of Sanitation Statistical Studies," L. A. Brushlinskaya, Sci Methods Bu of Sanitary Statistics, Ministry of Pub Health RSFSR, 5 pp</p> <p>"Sovetskoye Zdravookhraneniye" No 2</p> <p>Discussed in terms of Prikaz No 691 of Minister of Public Health RSFSR. Lists various lines along which to work including such problems as infantile mortality, tuberculosis, medical service for rural population, etc.</p> <p>FDB 75T80</p>	<p>USSR/Medicine - Public Health, Officers Mar/Apr 1948 Medicine - Public Health, Cooperation</p> <p>"All-Russian Council of Active Workers of Public Health 12-15 January 1948," Ya. O. Rodov, Docent, 6 pp</p> <p>"Sovetskoye Zdravookhraneniye" No 2</p> <p>Conference, in which 50 delegates took part, was opened by Cabinet Vice-President Dalmatov. Main basis for discussion was announcement of Minister of Public Health concerning tasks of Active Workers in 1948. Summarizes speeches made.</p> <p>FDB 75T81</p>	
<p>USSR/Medicine - Hygiene and Sanitation Mar/Apr 1948 Medicine - Malaria</p> <p>"Data of the Fourth Conference on the Study of the Medical and Sanitation Consequences of the War," S. Ye. Gal'perin, Dr Med Sci, Sci Secy, Commission for Study of Med and Sanitation Consequences of the War, 5 pp</p> <p>"Sovetskoye Zdravookhraneniye" No 2</p> <p>Summarizes speeches made at above conference. Progress reports were made by representatives of regions occu- pied by Germans during war. Discussed aspects of con- trol of malaria and tuberculosis, and rehabilitation of disabled veterans.</p> <p>FDB 75T82</p>	<p>USSR/Medicine - Public Health, Centers Mar/Apr 1948 Medicine - Public Health, History</p> <p>"Prophylactic Guidance and Dispensary Method in the Practice of Soviet Public Health," D. G. Oppengeym, Inst of Pub Health and His of Med, Acad Med Sci, 6 pp</p> <p>"Sovetskoye Zdravookhraneniye" No 2</p> <p>Presents historical survey of establishment of dis- pensaries in USSR. Stresses ideological aspect, e.g., 50 years experience is of no avail to British and French antituberculosis clinics, handicapped as they are by capitalistic conditions.</p> <p>FDB 75T83</p>	

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<p>USSR/Medicine - Public Health, Officers Mar/Apr 1948 Medicine - Public Health, Progress</p> <p>"The tasks of Members of the Public Health Service of the RSFSR in 1948," G. N. Beletskiy, Minister of Pub Health RSFSR, 10 pp</p> <p>"Sovetskoye Zdravookhraneniye" No 2</p> <p>Abridgement of speech delivered at All-Russia convention of active health workers. Main tasks in future are reduction of mortality rate, control of typhus parasites, tuberculosis, malignant tumors and venereal diseases. Work of past year is reviewed, various persons and institutions being singled out</p> <p>FDB 75T84</p>	<p>USSR/Metals May 1948 Aluminum Alloys Magnesium</p> <p>"A Quick Volumetric Method for the Determination of Magnesium in Aluminum Alloys," R. B. Glushkina, Plant imeni OGPU, 1/2 p</p> <p>"Zavod Lab" Vol XIV, No 5</p> <p>Method, described in detail, is based on property of citric acid which enables it to form stable complexes with ions of aluminum, iron and manganese.</p> <p>FDB 75T85</p>	
<p>USSR/Medicine - Public Health, Officers Mar/Apr 1948 (Contd)</p> <p>for commendation or censure. Reference is made to training of doctors in hospitals and polyclinics. Lists points which require attention if task set by RSFSR are to be fulfilled.</p> <p>FDB 75T84</p>	<p>USSR/Metals May 1948 Polarographic Analysis Electrolytes</p> <p>"Direct Polarographic Determination of Copper and Lead in a Nickel Electrolyte," I. A. Korshunov and L. N. Sazanova, Inst Chem, Gorkiy State U, 1 p</p> <p>"Zavod Lab" Vol XIV, No 5</p> <p>Copper waves are masked by diffusion wave. This difficulty can be overcome by treating nickel electrolyte with a small amount of hydrogen peroxide and soda, which splits up organic compounds and precipitates iron.</p> <p>FDB 75T86</p>	
<p>USSR/Metals May 1948 Testing Procedures Deformation</p> <p>"The Use of Conical Impressions for the Study of the Effect of Speed on the Resistance of Metals to Deformation," F. F. Vitman, N. N. Davidenkov, N. A. Zlatin, B. S. Ioffe, Leningrad Phys Tech Inst, Acad Sci USSR, 16 pp</p> <p>"Zavod Lab" Vol XIV, No 5</p> <p>Discusses plastic deformation of metals and determination of hardness and yield point by means of conical impressions produced by ballistic pendulum method. Presents mathematical treatment of various effects.</p> <p>FDB 75T87</p>	<p>USSR/Metals May 1948 Metallurgy, Powder Mechanics</p> <p>"A Method of Measuring Lateral Pressure During the Pressing of Metallo-ceramic Specimens," V. N. Goncharova, Gen Sci Res Inst of Eng and Machine Building, 4 pp</p> <p>"Zavod Lab" Vol XIV, No 5</p> <p>After discussing existing methods, author describes her own, which consists of measuring deformation of press walls, and calculating corresponding lateral pressure by Lamé's formula for thick-walled cylinders. Results are useful in powder metallurgy.</p> <p>FDB 75T88</p>	
<p>USSR/Metals May 1948 Aluminum Alloys Spectrum Analysis</p> <p>"Determination of Iron, Silicon, Copper and Zinc in Aluminum by the Spectrum Method," L. V. Drutskaya, Ural Aluminum Plant, 5 pp</p> <p>"Zavod Lab" Vol XIV, No 5</p> <p>Spectrum analysis has been used in Ural plant since 1943 for controlling commercial aluminum production. Describes method and compares results with those obtained by chemical analysis.</p> <p>FDB 75T89</p>	<p>USSR/Metals May 1948 Metallurgy, Ferrous Steel - Carbides</p> <p>"Isolation of the Carbide Phase Under Fixed Conditions," N. M. Popova and M. F. Rybina, All-Union Inst of Advn Materials, 3 pp</p> <p>"Zavod Lab" Vol XIV, No 5</p> <p>After describing difficulties inherent in electrolytic method of estimating carbide phase in steel, authors describe an apparatus for overcoming them. Principle used is continuous removal of carbide deposit from surface of specimen by a stream of cooled electrolyte.</p> <p>FDB 75T90</p>	

RESTRICTED	FDB Periodical Abstracts Scientific No 75	RESTRICTED
<p>USSR/Mining Peat Resources Mining Methods</p> <p>May 1948</p> <p>"News in the Staff of the Ministry of Electric Power Plants" 1½ pp</p> <p>"Torf Prom" No 5</p> <p>Describes briefly plans for establishment of socialistic competition at peat fields and for development of new peat fields as a method of fulfilling Stalin Five-Year Plan for Ministry of Electrostations.</p> <p>FDB 75T91</p>	<p>USSR/Mining Peat Resources Mining Methods</p> <p>May 1948</p> <p>"Peat in the Fergana Valley," N. P. Gerashchenko, Engr, 1¼ pp</p> <p>"Torf Prom" No 5</p> <p>Brief account of peat resources and methods for obtaining peat in Fergana valley region, located in Kaynara peat fields, one of three largest in Uzbek SSR.</p> <p>FDB 75T92</p>	
<p>CHINA/Nuclear Physics - Radioactive Ores Nuclear Physics - Uranium</p> <p>Aug 1947</p> <p>"Uranium Ore in Kwangsi Province"</p> <p>"K'o-hsueh Shih-pao" Vol XIV, No 2</p> <p>National Geological Survey and National Resources Commission have ascertained existence of uranium ore in Chung-shan Hsien, Kwangsi Province. Monazite, containing free thorium and uranium ore also found in gravel of Fa-pu-Sha Tin Mine. Ore containing thorium and uranium locally is called yellow-smoke, and is found in large quantities in concentrated tailings of tin ores. It is commonly found in Ping-kuei Tin Mine, belonging to National Resources Commission, and other mines in this region. (Complete translation)</p> <p>ID 75T93</p>	<p>USSR/Nuclear Physics - Counters, Electronic Nuclear Physics - Ions</p> <p>May 1948</p> <p>"High-Frequency Counter as an Indicator of Light Ions," A. M. Prokof'yev, Main Geophys Observatory, Leningrad, 2 pp</p> <p>"Zhur Tekh Fiziki" Vol XVIII, No 5</p> <p>Author described counter in previous article. Present paper shows that high-frequency sparks are caused by light air ions with a mobility of 0.47 cm²/V per sec and above. Submitted to Zh.E.T.F. 29 Oct 1947. Submitted 24 Nov 1947.</p> <p>FDB 75T94</p>	
<p>USSR/Physics X-Rays - Goniometers Photograph, X-Ray</p> <p>May 1948</p> <p>"The LITMO X-Ray Goniometer (Type Sauter I)," D. B. Gogoberidze and I. V. Yavorskiy, Leningrad Inst of Precision Mechanics and Optics, 6 pp</p> <p>"Zhur Tekh Fiziki" Vol XVIII, No 5</p> <p>Instrument described is an experimental model constructed in authors' institute. There are two X-ray photographs of a rock salt crystal. Submitted 12 Nov 1947.</p> <p>FDB 75T95</p>	<p>USSR/Physics Heat-Transmission Heat - Convection</p> <p>May 1948</p> <p>"On V. L. Shevel'kov's Article, 'Calculation of the Temperature Field in an Isotropic Medium in Front of a Moving Source of Heat'," R. Ya. Lyubov, Inst of Metallophysics, Cen Sci Res Inst of Ferrous Metal, 3 pp</p> <p>"Zhur Tekh Fiziki" Vol XVIII, No 5</p> <p>The correct solution of the equation $\frac{\partial t}{\partial \theta} = a \frac{\partial^2 t}{\partial x^2}$ when $\theta > 0$; $x > \xi(\theta)$ is $t = \xi(\theta) \cdot \frac{\partial t}{\partial \theta} + \frac{\partial t}{\partial x}$ not $\xi(\theta) = h - c \cdot \theta$ as stated by Shevel'kov.</p> <p>FDB 75T96</p>	
<p>USSR/Physics Spectrographs Light Sources</p> <p>May 1948</p> <p>"Illumination of the Slit of a Spectrograph by a Non-absorbent Three-Dimensional Source of Light," G. G. Slyusarev and V. M. Chulanovskiy, Sci Res Phys Inst, Leningrad State U, 8 pp</p> <p>"Zhur Tekh Fiziki" Vol XVIII, No 5</p> <p>J. R. Nielsen considered case of a rectangular slit illuminated by a source also of rectangular section (JOSA 20, 701, 1930). Difficulties of this problem are considerable, and Nielsen's formulas are complicated and difficult to apply to practical cases.</p> <p>FDB 75T97</p>	<p>USSR/Physics Impact, Electronic Glass, - Metallization</p> <p>May 1948</p> <p>"The Use of Discharges in Gas for the Preparation of Glass Surfaces for Aluminizing," V. N. Rozhdestvenskiy, State Ord of Lenin Optical School, 6 pp</p> <p>"Zhur Tekh Fiziki" Vol XVIII, No 5</p> <p>Description and results of series of experiments on preparation of glass discs for aluminizing. Surface was divided into three annuli, outer covered, inner uncovered, and middle provided with a removable screen. Disc was placed in vacuum apparatus and subjected to ionic bombardment for several periods</p> <p>FDB 75T98</p>	

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<p>USSR/Physics (Contd) May 1948</p> <p>Author obtains simpler formulas by considering case of a circular slit illuminated by a cylindrical source. Submitted 11 Dec 1947.</p>		<p>USSR/Physics (Contd) May 1948</p> <p>and at various intensities. Such aspects of subject as influence of presence of fatty acids on bubble formation are being investigated further. Submitted 27 Oct 1947.</p>
FDB 75T97		FDB 75T98
<p>USSR/Physics May 1948</p> <p>Photoelectric Cells, Selenium</p> <p>"Photometric Comparison of Selenium Photoelectric Cells With Compensation Filters," M. S. Kapnik and S. G. Yurov, All-Union Elec Eng Inst imeni V. I. Lenin, Moscow, 6 pp</p> <p>"Zhur Tekh Fiziki" Vol XVIII, No 5</p> <p>Description and results of comparative experiments carried out on 9 cells of different makes. Method used was to measure strength of a colored light first by using cell, and then by a more accurate method. Quality of compensation of photo element was determined by divergence between measured and true values. Submitted 4 Nov 1947.</p>		<p>USSR/Physics May 1948</p> <p>Ionization Cathodes</p> <p>"The Problem of Ionization of Atoms and Neutralization of Ions on the Surface of a Semiconductor Cathode," N. D. Morgulis, Inst of Phys, Acad Sci Ukrainian SSR, Kiev, 6 pp</p> <p>"Zhur Tekh Fiziki" Vol XVIII, No 5</p> <p>Phenomena are described and distinguished from those associated with metallic surfaces. Approximate probability expressions are deduced by means of which it is possible to explain results obtained in pre-</p>
FDB 75T99		FDB 75T100
<p>USSR/Radio May 1948</p> <p>Wave Guides Mathematics, Applied</p> <p>"Excitation of a Semi-Infinite Radio Wave Guide Through a Slit in the Base," M. L. Levin, Phys Tech Inst, Gor'kiy State U, 4 pp</p> <p>"Zhur Tekh Fiziki" Vol XVIII, No 5</p> <p>A purely mathematical treatment of subject by method of vector analysis. Submitted 10 Nov 1947.</p>		<p>USSR/Physics (Contd) May 1948</p> <p>vicious investigations of calcium and magnesium oxides. Submitted 16 Dec 1947.</p>
FDB 75T101		FDB 75T100
<p>USSR/Radio May 1948</p> <p>Wave Guides Antennas</p> <p>"Theory of an Annular Resonance Slit in a Wave Guide," M. L. Levin, PhysTech Inst, Gor'kiy State U, 14 pp</p> <p>"Zhur Tekh Fiziki" Vol XVIII, No 5</p> <p>Gives theory of a resonance slit antenna, shaped like a narrow λ-ring, cut at "bottom" of a semi-infinite wave guide of circular section. Shows that λ-ring slit can be made in resonance with existing wave. Submitted 10 Nov 1947.</p>		<p style="text-align: center;">List of Abbreviations used in FDB Periodical Abstracts</p> <p>ID Intelligence Division Library AMC Air Documents Division, Air Materiel Command ST Reference Division, State Department BM Bureau of Mines, Department of Interior BS National Bureau of Standards SI Smithsonian Institution LC Library of Congress FDB Foreign Documents Branch, CIA COM Department of Commerce AF A-2 Library, USAF</p>
FDB 75T102		