

HEAT TRANSFER BIBLIOGRAPHY—RUSSIAN WORKS

A. V. LUIKOV

Heat and Mass Transfer Institute of the B.S.S.R. Academy of Sciences, Minsk, U.S.S.R.

(Received 1 December 1964)

BOOKS

- A. V. BOLGARSKY, G. A. MUKHACHEV and V. K. SHCHUKIN, *Thermodynamics and Heat Transfer*. Vyssh. Shkola, Moscow (1964).
S. M. GORLIN and I. I. SLEZINGER, *Aeromechanical Measurements: Methods and Instruments*. Nauka, Moscow (1964).
I. YE. IDELCHIK, *Aerodynamics of Industrial Devices: Supply, Extraction and Uniform Flow Distribution*. Energiya, Moscow-Leningrad (1964).
A. M. LITVIN, *Theoretical Fundamentals of Thermal Engineering: Technical Thermodynamics and the Heat Transfer Theory*. Energiya, Moscow-Leningrad (1964).
S. I. MOCHAN, Ed., *Aerodynamical Calculation of Boiler Plants*. Energiya, Moscow-Leningrad (1964).
A. S. PREDVODITELEV, Ed., *The Physical Gasdynamics and Properties of Gases at High Temperatures*. (Collected Papers). Nauka, Moscow (1964).
I. M. RAZUMOV, *Fluidization and Pneumatic Transport of Loose Materials*. Khimiya, Moscow (1964).

GENERAL

- YU. D. ANUFRIEV and A. YA. PARSHIN, The tenth All-Union Conference on low temperature physics. *Uspekhi Fiz. Nauk* **83**, vyp. 2, 361 (1964).
B. M. BERKOVSKY, The first National Heat Transfer Conference, Japan. *Inzh.-Fiz. Zh.* **7**, No. 11, 120 (1964).
I. T. ELPERIN, The Second All-Union Heat and Mass Transfer Conference. *Inzh.-Fiz. Zh.* **7**, No. 10, 130 (1964).
V. V. KRASNIKOV and A. V. GORBATOV, Mass-transfer characteristics and structural mechanical properties of food products. Moscow (1963).
G. A. MAKSIMOV, On the book *Tables of Equilibrium Specific Moisture Content and Bond Energy Between Moisture and the Material* by L. M. NIKITINA. *Inzh.-Fiz. Zh.* **7**, No. 7, 123 (1964).
V. A. OSPOVA, *The Experimental Investigation of Heat-Transfer Processes*. Energiya, Moscow-Leningrad (1964).
M. B. RAVICH, *Simplified Methods of Thermal Engineering Calculations: Thermal Engineering Calculations using Generalized Combustion Constants*, 4th edn. Nauka, Moscow (1964).
G. M. SHCHEGLOW, Ed., *Heat Transfer and Fluid Dynamics*. (Collected Papers). Izd. Akad. Nauk USSR, Kiev (1964).

- V. B. ZENKEVICH, On liquid behaviour in conditions of weightlessness. *Teplofiz. Vysok. Temper.* **2**, No. 2, 230 (1964).
V. M. ZHUKOV, The All-Union Conference on heat transfer and hydraulic resistance in two-phase flow motion in elements of power machines and installations. *Teplofiz. Vysok. Temper.* **2**, No. 2, 303 (1964).

THERMODYNAMICS

- A. I. ALTSYBEEVA and A. G. MORACHEVSKY, Phase equilibria and thermodynamic properties of the system methyl ethyl ketone-water. *Zh. Fiz. Khim.* **38**, vyp. 6, 1569 (1964).
A. I. ALTSYBEEVA and A. G. MORACHEVSKY, Phase equilibria in the ternary system se-butanol-methyl ethyl ketone-water. *Zh. Fiz. Chim.* **38**, vyp. 6, 1574 (1964).
A. I. ANDRYUSHCHENKO, V. N. LAPSHOV *et al.*, Methods of thermodynamic calculation of optimum parameters of a gaseous part of binary steam-gas plants. *Izv. Vyssh. Ucheb. Zav. Energetika* No. 6, 54 (1964).
A. A. ANTONOV and P. G. MASLOV, Thermodynamic properties of some aldehydes, ketones and carboxylic acids. *Zh. Fiz. Khim.* **38**, vyp. 3, 600 (1964).
I. G. ARZAMANOVA, E. N. GURIANOVA and I. P. GOLDSTEIN, Determination of the thermodynamic constants of molecular compounds by means of dielectrometric titration. *Dokl. Akad. Nauk SSSR* **155**, No. 6, 1391 (1964).
R. G. AVARBE and YU. N. VILK, On the calculation of the dependence of some thermodynamic base functions on temperature and concentration. *Teplofiz. Vysok. Temper.* **2**, No. 3, 406 (1964).
N. N. AVGUL, A. V. KISELEV and I. A. LYGINA, Standard thermodynamic characteristics of adsorption on a homogeneous surface and the activity coefficient of the adsorbate in the adsorption layer. *Zh. Fiz. Khim.* **38**, No. 8, 2055 (1964).
V. M. BRODYANSKY, On an exergetic temperature scale. *Izv. Vyssh. Ucheb. Zav. Energetika* No. 5, 65 (1964).
V. M. BRODYANSKY and A. V. MARTYNOV, The dependence of the Ranque-Hilsch effect on temperature. *Teploenergetika* No. 6, 76 (1964).
I. T. ELPERIN and V. A. MINKOV, On the use of two-phase systems as thermodynamic working substances. *Inzh.-Fiz. Zh.* **7**, No. 9, 102 (1964).
G. V. EVSEEVA, A. M. EVSEEV and L. V. ZENKEVICH,

- Thermodynamic properties of alloys of the system cadmium-thallium. *Zh. Fiz. Khim.* **38**, vyp. 3, 801 (1964).
- L. V. GURVICH and V. G. RYABOVA, Determination of dissociation energies of metal halogenides on the basis of the investigations of the equilibrium of reactions in flames. I. *Teplofiz. Vysok. Temper.* **2**, No. 3, 401 (1964).
- YE. F. IVANOVA and V. V. ALEKSANDROV, Thermodynamic properties of electrolytes in non-aqueous solutions. *Zh. Fiz. Khim.* **38**, vyp. 4, 878 (1964).
- A. N. KIRGINTSEV, Some laws in the thermodynamics of ternary aqueous salt solutions. *Dokl. Akad. Nauk SSSR* **157**, No. 2, 396 (1964).
- S. I. KOSTERIN and B. M. PAVLOV, A qualitative method for filling an isoteniscope with the tested liquid. *Inzh.-Fiz. Zh.* **7**, No. 11, 117 (1964).
- A. N. KRAIKO, Analytical presentation of thermodynamic functions of air. *Inzh. Zh.* **4**, Vyp. 3, 548 (1964).
- O. D. LAGUTKIN, The thermodynamic data of octabicyclobutane in a wide range of pressures and temperatures. *Izv. Vyssh. Ucheb. Zav. Energetika* No. 7, 60 (1964).
- T. M. LAVROVA, On the study of the connection between the Gibbs distribution law and the first law of thermodynamics. *Uchen. Zap. Kalininsk. Ped. In-t* **33**, 18 (1963).
- N. I. MELNICHENKO, On pressure of saturated steam of a heavy water. *Teploenergetika* No. 6, 63 (1964).
- N. F. OTRUSHCHENNIKOV, On the connection between the adiabatic compressibility coefficient and thermal properties of liquid. *Izv. Vyssh. Ucheb. Zav. Fizika* No. 3, 116 (1964).
- Yu. M. POVAROV, Yu. M. KESSLER et al., An enquiry into the thermodynamic properties of solutions of strong electrolytes in solvents having high dielectric constants. *Dokl. Akad. Nauk SSSR* **155**, No. 6, 1411 (1964).
- G. D. RABINOVICH, Conference on Thermodynamics. *Inzh.-Fiz. Zh.* **7**, No. 11, 120 (1964).
- S. L. RIVKIN, G. V. TROYANOVSKAYA and T. S. AKHUNDOV, The experimental investigation of specific volumes of water from isochores near the critical one. *Teplofiz. Vysok. Temper.* **2**, No. 2, 219 (1964).
- S. L. RIVKIN and A. N. VINNIKOVA, The thermal capacity of ethyl alcohol solutions in water at temperatures 25–50°C. *Teploenergetika* No. 6, 59 (1964).
- B. A. ROMANOV, The tasks and achievements of the First Scientific–Methodical Conference on Thermodynamics. *Trudy (Mosk. In-t Neftekhim. i Gaz. Prom.)* vyp. 47, 181 (1964).
- G. V. SAMSONOV and V. A. PASECHNIK, The thermodynamic potential, enthalpy and entropy of swelling in ion exchanges process. $H^+ - Cs^+$ exchange on SBS sulfonated resins. *Zh. Fiz. Khim.* **38**, vyp. 4, 858 (1964).
- V. K. SEMCHENKO, On the statistical theory of dipole dielectrics. *Zh. Fiz. Khim.* **38**, vyp. 7, 1871 (1964).
- E. YU. SILINA and T. A. KHACHATURYAN, On the calculation of the influence of thermal diffusion in the determination of the pressure of saturated steam using a flow method. *Trudy In-ta (Mosk. Khim. Technol. In-t)* vyp. 44, 13 (1963).
- E. YU. SILINA and T. A. KHACHATURYAN, The temperature pressure dependence for saturated steam of mercury selenide. *Trudy In-ta (Mosk. Khim.-Tekhnol. In-t)* vyp. 44, 20 (1963).
- V. V. STRUMINSKY, Hilbert's method of solving Boltzmann's kinetic equation. *Dokl. Akad. Nauk SSSR* **158**, No. 1, 70 (1964).
- VAN TUN, Thermal potential theory, I. *Zh. Vychisl. Matem. i Matem. Fiz.* **4**, No. 4, 660 (1964).
- S. V. VALLANDER, J. A. EGOROVA and M. A. RIDALEVSKAYA, Boltzmann's statistic distribution as a solution of kinetic equations for gas mixtures. *Vestn. Leningr. Univ. ser. Matem., Mekhan. i Astronom.* No. 7, vyp. 2, 57 (1964).
- M. P. VUKALOVICH and A. N. GUREEV, An experimental investigation of heat capacity of carbon dioxide. *Teploenergetika* No. 8, 80 (1964).
- M. P. VUKALOVICH, *Tables of Thermodynamical Properties of Water and its Vapour*. Gosenergoizdat, Moscow–Leningrad (1963).
- F. A. VULMAN and V. P. VORONINA, The calculation of thermodynamic properties of water and water vapour on a high-speed computer using the Zagoruchenko-Kazavchinsky equation. *Teploenergetika* No. 6, 64 (1964).
- B. N. YUDAEV, Ed., *The Collection of Problems on Technical Thermodynamics and Heat Transfer*. Vyssh. Shkola, Moscow (1964).
- L. A. ZHARKOVA and N. G. BARANCHEEVA, Thermodynamic properties of compounds of the type $MeMoO_3$. *I. Zh. Fiz. Khim.* **38**, vyp. 3, 752 (1964).

HEAT CONDUCTION

- A. A. ALEKSASHENKO and V. A. ALEKSASHENKO, A solution of a border heterogeneous heat conduction problem over a segment of finite length in a closed form. *Trudy Vsesoyuzn. Zaochn. In-ta* vyp. 24, 93 (1963).
- M. I. ALIEV and G. T. AKHMEDLI, Heat conduction investigation of alloyed gallium arsenide. *Izr. Akad. Nauk SSSR, ser. Fizichesk.* **28**, No. 6, 977 (1964).
- A. F. ANDREEV, Heat conductivity of the intermediate state of superconductors. *Zh. Eksperim. i Teoret. Fiz.* **46**, vyp. 5, 1823 (1964).
- S. I. ANISIMOV, The problem on heat explosion for a hollow cylinder. *Inzh.-Fiz. Zh.* **7**, No. 11, 115 (1964).
- M. YA. ANTIMIROV and Z. I. GELLER, Solution of thermal problems concerning the movement of the boundary according to the law $\beta\sqrt{t}$. *Inzh.-Fiz. Zh.* **7**, No. 9, 57 (1964).
- E. T. ARTYKPAAEV, Some particular problems of the heat-conduction theory. *Inzh.-Fiz. Zh.* **7**, No. 10, 80 (1964).
- P. I. BERENSHTEIN, The determination of maximum allowable heating and cooling velocities of floor plates for kilning in tunnel furnaces on the basis of given laboratory investigations. *Trudy (VNII Stroit. Keramiki)* vyp. 23, 36 (1964).
- M. YA. BROVMAN and Yu. S. DODIN, Calculation of the

- temperature field in rollers. *Inzh.-Fiz. Zh.* 7, No. 11, 77 (1964).
- P. E. BULAVIN and V. M. KASHCHEEV, Solution of the non-homogeneous equation of heat-conduction for multilayer bodies. *Inzh.-Fiz. Zh.* 7, No. 9, 71 (1964).
- E. D. DEVIATKOVA, A. V. GOLUBKOV *et al.*, The effect of spin-phonon interaction on thermal conductivity of MnTe. *Fiz. Tverd. Tela* 6, vyp. 6, 1813 (1964).
- S. D. DREIZIN-DUDCHENKO, A programme for the calculation of temperature fields. *Sb. Nauchn. Trudov (Nauch.-Issled. i Proektn. In-t Metallurg. Prom. "Giprostal")* vyp. 5, 111 (1962).
- B. I. FONDYMAKIN and F. G. SOLINOV, Measurement of heat conductivity of glass in a system $\text{SiO}_2\text{-Zn}_2\text{O}\text{-Al}_2\text{O}_3\text{-Z}_2\text{O}_2$ at its crystallization. *Teplofiz. Vysok. Temper.* 2, No. 3, 397 (1964).
- V. M. GEMBARA, Heat conduction equations for plates and envelopes of variable thickness. *Dokl. na III Nauchn. Soveshchan. po Teplov. Napryazh. v Element. Konstr. Iyun* 1962, vyp. 3, 9 (1963).
- E. A. GURIEVA, V. A. KUTASOV and I. A. SMIRNOV, Heat conductivity of the crystal lattice of Bi_2Te_3 -base solid solutions. *Fiz. Tverd. Tela* 6, vyp. 8, 2453 (1964).
- M. A. ILGAMOV, On transient heat conductivity and optimum parameters of three-layer plates. *Izv. Vyssh. Ucheb. Zav. Aviats. Tekhnika* No. 1, 60 (1964).
- E. A. IODKO, An analytical method of temperature field calculations in bodies of the simplest shape with moving boundaries. *Inzh.-Fiz. Zh.* 7, No. 11, 94 (1964).
- V. V. IVANOV, Temperature distribution in a toroidal coil heated by electric current. *Inzh.-Fiz. Zh.* 7, No. 7, 72 (1964).
- P. I. KHISTICHENKO and S. I. PROKOPETS, Transient temperature field of an open cylindrical shell. *Inzh.-Fiz. Zh.* 7, No. 11, 90 (1964).
- A. F. KHRUSTALYEV, A steady-state problem of the heat-conduction theory for a parallel plane layer. *Inzh.-Fiz. Zh.* 7, No. 8, 47 (1964).
- G. A. KILCHINSKAYA, On a thermoparametric resonance of flexible envelopes in a transient temperature field. *Dokl. na III Nauchn. Soveshchan. po Teplov. Napryazh. v Element. Konstr. Iyun* 1962, vyp. 3, 132 (1963).
- M. K. KLEENER and N. YU. TAITS, Heating of thin bodies with a linear variation of a water number of the heating gases. *Inzh.-Fiz. Zh.* 7, No. 7, 9 (1964).
- V. F. KOLESOV, Transient thermoelasticity problems for a plate and a cylindrical envelope. *Inzh.-Fiz. Zh.* 7, 9, 64 (1964).
- P. I. KORZH, L. V. POVOLOTSKY *et al.*, An investigation of transient operating conditions of a cooled disk rotor of a gas turbine. *Energomashinostr.* No. 5, 6 (1964).
- G. V. KOSTRYUKOV and V. T. ZELENIN, The influence of heat conductivity of an annular space on temperature of a gas-oil mixture. *Trudy (Tatarsk. Neft. NI)* vyp. 5, 166 (1964).
- S. M. KOTLYAR, A transient problem of heat conduction theory for a hollow cylinder. *Izv. Vyssh. Ucheb. Zav. Aviats. Tekhnika* No. 1, 122 (1964).
- A. D. KOVALENKO, Asymmetrical deformation of conical envelopes, caused by irregular heating. *Dokl. na III Nauchn. Soveshchan. po Teplov. Napryazh. v Element. Konstr. Iyun* 1962, vyp. 3, 69 (1963).
- L. I. KUDRYASHEV, V. P. VESELOV and A. V. GREKOV, Solution of transient heat-conduction problems in metals with variable thermal properties with convective and radiant heat transfer on EI-12. *Trudy (Kuibyshev. Aviats. In-t)* vyp. 15, p. 2, 71 (1963).
- V. I. KVALVASSER and YA. F. RUTNER, A method of finding Green's functions in boundary value problems of heat conduction equation for a line segment with uniformly moving boundaries. *Dokl. Akad. Nauk SSSR* 156, No. 6, 1273 (1964).
- N. N. LEBEDEV and I. P. SKALSKAYA, Some heat conduction theory problems for wedge-shaped bodies. *I. Zh. Tekhn. Fiz.* 34, vyp. 5, 801 (1964).
- L. P. MEZHOV-DEGLIN, The heat conductivity of solid He^4 . *Zh. Eksper. i Teoret. Fiz.* 46, vyp. 5, 1926 (1964).
- M. G. MILVIDSKY and V. V. EREMEEV, On the estimation of heat conductivity coefficients in solids and melts near the melting point. *Fiz. Tverd. Tela* 6, vyp. 7, 1962 (1964).
- R. S. MINASYAN, Steady heat propagation in straight parallel pipes. *Inzh.-Fiz. Zh.* 7, No. 11, 82 (1964).
- I. A. MOTOVILOVETS, The temperature field and thermal stresses in a heated cylindrical envelope with a variable liquid level. *Dokl. na III Nauchn. Soveshchan. po Teplov. Napryazh. v Element. Konstr. Iyun* 1962, vyp. 3, 70 (1963).
- G. F. MUCHNIK and YU. A. POLYAKOV, Biot's variational method in problems of heat conduction with variable boundary conditions. *Teplofiz. Vysok. Temper.* 2, No. 3, 424 (1964).
- O. I. NAPETVARIDZE, On a basic contact boundary problem of heat conduction theory. *Soobshch. Akad. Nauk Gruz. SSR* 33, vyp. 2, 271 (1964).
- N. I. NAZAROV, On the application of the variational method to the problems of transient heat conduction. *Dokl. na III Nauchn. Soveshch. po Teplov. Napryazh. v Element. Konstr. Iyun* 1962, vyp. 3, 19 (1963).
- YA. M. NAZIEV, On heat conduction of saturated hydrocarbons. *Khim. i Tekhnol. Topliv i Masel* No. 8, 26 (1964).
- N. I. NIKITENKO and L. I. NIKITENKO, A temperature field of systems of bodies, having regions of levelling temperature. *Izv. Vyssh. Ucheb. Zav. Aviats. Tekhn.* No. 1, 127 (1964).
- I. G. ORLOVA and I. S. KAINARSKY, Kinetics of corundum deformation in heating. *Dokl. Akad. Nauk SSSR* 157, No. 2, 331 (1964).
- A. A. OTS, Thermal resistance of depositions on screen tubes. *Trudy Tallinsk. Politekhn. In-ta. Ser. A*, No. 206, 57 (1963).
- R. A. PAVLOVSKY, A solution of the mixed stationary problem of heat conduction for a cylinder. *Inzh.-Fiz. Zh.* 7, No. 11, 73 (1964).
- I. M. PILAT and L. I. ANATYCHUK, Anisotropism of heat conduction in cadmium antimonide. *Izv. Akad. Nauk SSSR. Ser. Fizichesk.* 28, No. 6, 1040 (1964).
- YE. P. PLOTKIN and YE. I. MOLCHANOV, The temperature field in gas turbine blades under transient conditions. *Teploenergetika* No. 6, 28 (1964).
- YE. P. PLOTKIN and YE. I. MOLCHANOV, Thermal stresses

- in a turbine blade (of a gas turbine) for oscillating gas temperature. *Dokl. na III Nauchn. Soveshchan. po Teplov. Napryazh. v Element. Konstr. Iyun* 1962, vyp. 3, 193 (1963).
- V. N. POPOV, N. V. TSEDERBERG and N. A. MOROZOVA, The experimental investigation of heat conductivity of seven samples of oil-products. *Izv. Vyssh. Ucheb. Zav. Neft i Gaz* No. 6, 55 (1964).
- M. G. RAMAZANZADE, On the theory of heat conductivity of liquids. *Izv. Vyssh. Ucheb. Zav. Neft. i Gaz* No. 5, 83 (1964).
- I. M. RAZUMOV, N. I. NIKITINA and M. E. AEROV, Simulation of heat fields in installations with uniformly distributed internal heat sources with prescribed boundary conditions of the third kind. *Inzh.-Fiz. Zh.* 7, No. 8, 89 (1964).
- V. A. RODIONOVA, Transient heat conduction of a thin envelope. *Issledov. po Uprug. i Plastichn. Sb.* 3, 138 (1964).
- Yu. L. ROZENSHTOK and A. F. CHUDNOVSKY, Application of the single parameter integral method to the solution of heat-conduction problems for a medium with variable thermal properties. *Inzh.-Fiz. Zh.* 7, No. 11, 98 (1964).
- I. A. SELIVANOVA and D. T. KOKOREV, Experimental determination of the attenuation coefficient of radiant flux in a selective-absorbing medium. *Inzh.-Fiz. Zh.* 7, No. 10, 117 (1964).
- G. T. SERGEEV, Two-dimensional steady-state heat conduction of a finned surface. *Inzh.-Fiz. Zh.* 7, No. 8, 51 (1964).
- G. S. SESYUK, The calculation of heating a semi-infinite wall (with a given initial temperature gradient) with a constant surface temperature. *Izv. Vyssh. Ucheb. Zav. Chern. Metallurg.* No. 2, 164 (1964).
- Ye. M. SHAKHOB, The integral equations of a problem of unstable melting of vitreous materials. *Inzh. Zh.* 4, vyp. 2, 251 (1964).
- M. M. SIDLYAR, On integration of the heat conductivity equation in the case of a time dependent heat-transfer coefficient. *Teplov. Napryazh. v Element. Konstr.* vyp. 3, 38 (1963).
- L. I. SLOBODYANYUK and A. A. SENDETSKY, The determination of thermal resistance of single- and multi-layer materials under the conditions of a three-dimensional heat flow. *Izv. Vyssh. Ucheb. Zav. Energetika* No. 7, 54 (1964).
- G. A. SURKOV and V. I. KRYLOVICH, Application of integral transformations to the solution of heat conduction problems with a moving boundary. *Inzh.-Fiz. Zh.* 7, No. 7, 80 (1964).
- Ye. V. TESLYUK, On a particular problem of heat conduction and filtration, taking place during the effects of heat in porous headers. *Nauchn.-Tekhn. Sborn. po Dobychne nefti* vyp. 22, 50 (1964).
- V. N. TIMOFEEV and Yu. A. SAMOILovich, An estimation of the plastic deformation effect on thermal stresses in heating of a steel cylinder. *Sb. Nauchn. Trudov (VNII Metallurg. Teplotekhn.)* No. 10, 68 (1963).
- A. A. UGLOV, A temperature field in a single crystal obtained by the Chokhralsky method. *Inzh.-Fiz. Zh.* 7, No. 9, 118 (1964).
- Yu. V. VIDIN and G. P. BOIKOV, Application of the zonal calculation method to asymmetric problems of heat conduction. *Inzh.-Fiz. Zh.* 7, No. 7, 75 (1964).
- I. I. VISHNEVSKY and B. Ya. SUKHAREVSKY, The influence of point defects on heat conductivity of substitutional solid solutions with cation vacancies. *Fiz. Tverd. Tela* 6, vyp. 7, 2168 (1964).
- V. S. ZARUBIN, The effect of the method of approximation of boundary conditions on the stability of the numerical solution of heat-conduction problems. *Inzh.-Fiz. Zh.* 7, No. 11, 103 (1964).
- L. I. ZHEMKOV, The application of the Maupertur's principle for the investigation of non-linear problems of heat-conduction. *Trudy (Kuibish. Aviats. In-t)* vyp. 15, p. 2, 267 (1963).
- L. I. ZHEMKOV, The investigation of the initial stages of non-stationary heat-transfer processes. *Trudy (Kuibish. Aviats. In-t)* vyp. 15, p. 2, 257 (1963).

CONVECTIVE HEAT TRANSFER

- G. V. ALEKSEEV, B. A. ZENKEVICH and V. I. SUBBOTIN, Burnout heat fluxes in annular channels with two-sided heat supply. *Inzh.-Fiz. Zh.* 7, No. 9, 30 (1964).
- V. M. ANTUFIEV, Comparative investigations of convective surfaces on the base of energy characteristics. *Energomashinostr.* No. 5, 9 (1964).
- K. M. AREFIEV and I. A. GNEDINA, Criterial formula for critical heat fluxes in forced motion of a subcooled liquid. *Inzh.-Fiz. Zh.* 7, No. 8, 3 (1964).
- S. K. ASLANOV, The effect of temperature conditions on stability of the rotational fluid motion. *Inzh.-Fiz. Zh.* 7, No. 9, 88 (1964).
- N. M. BELYANIN, The experimental investigation of friction and heat transfer in gas flow in a pipe. *Zh. Prikl. Mekhan. i Tekhn. Fiz.* No. 4, 139 (1964).
- V. G. CHAKRYGIN and L. P. SEVERYANINA, The end effect and steady temperature distribution in a pipe, heated over a region of finite length. *Teploenergetika* No. 7, 67 (1964).
- V. V. DILMAN, T. A. ZHILYAEVA and M. B. AIZENBUD, Determination of the coefficient of longitudinal turbulent diffusion. *Inzh.-Fiz. Zh.* 7, No. 8, 55 (1964).
- V. K. EVA, On the effect of a local increase of heat flux along the pipe length on the value of the critical heat fluxes in forced motion of steam-water mixture. *Trudy Akad. Nauk Litovsk. SSR. Ser. B*, 89 (1963).
- A. S. FREIDIN, The application of the generalized hydrodynamic heat transfer theory to fluid flow in a channel with a local change of cross-section. *Trudy (Kyibish. Aviats. In-t)* vyp. 15, p. 2, 91 (1963).
- A. S. FREIDIN and A. V. YURIN, Some results of experimental data on heat-transfer intensification in channels. *Trudy (Kyibish. Aviats. In-t)*, vyp. 15, p. 2, 117 (1963).
- N. A. FRIDLENDER and A. M. FAIZILBER, An increased integral of similarity of concentration and temperature fields. *Nauchn. Trudy (Mosk. Tekhnolog. In-t Legkoi Prom.)* vyp. 28, 308 (1963).
- Z. T. GALIULLIN and B. L. KRIVOSHEIN, Non-adiabatic real gas flow in a gas-line. *Inzh.-Fiz. Zh.* 7, No. 11, 47 (1964).

- M. L. GOFFMAN, A temperature of a plate in a turbulent hypersonic flow including the effects of radiation. *Trudy Vyssh. Aviats. Uchil. GVF* No. 17, 3 (1963).
- V. M. GOLOVIN and M. YA. SYCHEV, On dissipative heating of liquid in laminar motion through a slit between parallel flat walls. *Trudy (Kuibysh. Aviats. In-t)* vyp. 15, p. 2, 157 (1963).
- V. M. GOLOVIN and M. YA. SYCHEV, The influence of mechanical energy dissipation on heat transfer for laminar motion of a liquid through a slit between parallel flat walls. *Trudy (Kuibysh. Aviats. In-t)* vyp. 15, p. 2, 163 (1963).
- V. M. KAPINOS, Heat transfer for a flow through a gap between two rotating disks. *Izv. Akad. Nauk SSSR. Energetika i Transport* No. 4, 511 (1964).
- N. V. KLIENTOV, The hydrodynamic resistance and heat transfer in a free jet. *Trudy (Kuibysh. Aviats. In-t)* vyp. 15, p. 2, 41 (1963).
- L. I. KUDRYASHEV and B. N. ASTRELIN, The influence of transient conditions on the heat-transfer coefficient in flows around bodies of spherical shape in the region of very small Re numbers. *Trudy (Kuibysh. Aviats. In-t)* vyp. 15, p. 2, 185 (1963).
- L. I. KUDRYASHEV and V. P. IGNATOV, On the connection between external heat transfer and the internal heat conduction process in an infinite plane-parallel flow round a cylinder. *Trudy (Kuibysh. Aviats. In-t)* vyp. 15, p. 2, 72 (1963).
- L. I. KUDRYASHEV and N. F. ROMEIKO, The application of a boundary layer theory for the determination of the resistance coefficients and heat-transfer coefficients at constant heat loads along a length of a circular pipe. *Trudy (Kuibysh. Aviats. In-t)* vyp. 15, p. 2, 3 (1964).
- I. A. KUZNETSOV, Unsteady heat transfer in a pipe-line. *Inzh.-Fiz. Zh.* 7, No. 11, 16 (1964).
- V. L. LELCHUK and G. I. ELFIMOV, Heat transfer to a turbulent flow of argon inside a pipe at large temperature differences and high temperatures of a wall. *Teplofiz. Vysok. Temper.* 2, No. 2, 243 (1964).
- V. I. MALYUKEVICH, Heat transfer between moving dispersed medium and a tube wall. *Inzh.-Fiz. Zh.* 7, No. 9, 38 (1964).
- A. YE. MARENOK, Heat transfer in laminar slip flow. *Inzh.-Fiz. Zh.* 7, No. 8, 93 (1964).
- G. A. MAYATSKY, Heat transfer in free convection. *Trudy (Kuibysh. Aviats. In-t)* vyp. 15, p. 2, 215 (1963).
- I. I. MELENTIEVA, The influence of unsteady-state on a turbulent heat flux rating. *Trudy (Leningr. Gidrometeorol. In-t)* vyp. 18, 161 (1963).
- V. P. MOTULEVICH, The dependence of burn-out heat fluxes on the wetting angle of the heating surface. *Inzh.-Fiz. Zh.* 7, No. 11, 112 (1964).
- YU. K. MUST, The investigation of convective heat transfer using a model of a furnace with a frontal arrangement of burners. *Trudy Tallinsk. Politekhn. In-ta. Ser. A*, No. 206, 67 (1963).
- I. F. NOVOZHILOV and V. K. MIGAI, Convective heat-transfer intensification inside pipes by means of the application of artificial roughness. *Teploenergetika* No. 9, 60 (1964).
- V. N. ORLOV and A. S. FREIDIN, The experimental de-termination of heat transfer intensification in a two-angle channel with a local cross-section increase. *Trudy (Kuibysh. Aviats. In-t)* vyp. 15, p. 2, 106 (1963).
- A. L. PARNAS, Experimental study of the unsteady airflow effect on heat transfer for a cylinder in transverse flow. *Inzh.-Fiz. Zh.* 7, No. 10, 37 (1964).
- A. PAVEL, The determination of the heat-transfer coefficient in a fluidized bed. *Izv. Vyssh. Ucheb. Zav. Neft i Gaz* No. 7, 77 (1964).
- A. A. PAVLENKOV, Experimental determination of free convection effect on heat transfer and aerodynamic force in cross flow round a cylinder. *Trudy (Kuibysh. Aviats. In-t)* vyp. 15, p. 2, 221 (1963).
- T. L. PERELMAN, The effect of the control of a boundary layer on transfer processes. *Dokl. Akad. Nauk BSSR* 8, No. 4, 231 (1964).
- T. L. PERELMAN and V. B. RIVKIN, The uniqueness of the solution of one conjugate heat transfer problem. *Dokl. Akad. Nauk BSSR* 8, No. 6, 365 (1964).
- B. A. PERMYAKOV and V. A. LOKSHIN, Heat transfer investigation from a heating wall to a dust carrying air flow. *Teploenergetika* No. 9, 58 (1964).
- S. G. PLATONOVA, An investigation of heat transfer and resistance of some compact surfaces. *Inzh.-Fiz. Zh.* 7, No. 9, 3 (1964).
- N. F. ROMEIKO, The results of investigations of the local coefficients of heat transfer and resistance in turbulent gas flow under the conditions of constant heat flux along a length of a round tube. *Trudy (Kuibysh. Aviats. In-t)* vyp. 15, p. 2, 73 (1963).
- I. N. SADIKOV, Heat transfer in the entrance regions of plane and rectangular passages. *Inzh.-Fiz. Zh.* 7, No. 9, 44 (1964).
- G. D. SALAMANDRA and I. K. FEDOSEYEVA, Measurement of gas velocity in an inflammable fluid. *Inzh.-Fiz. Zh.* 7, No. 7, 47 (1964).
- A. G. SHASHKOV, Block diagrams for measuring flow parameters with the help of thermistors. *Inzh.-Fiz. Zh.* 7, No. 9, 83 (1964).
- V. V. SLAVNOV, A boundary layer in free convection of a liquid along a vertical non-isothermal wall. *Sb. Nauchn. Trudov (Perm. Politekhn. In-t)* No. 13, 67 (1963).
- V. A. SMIRNOV, The integral relations solution of a free-convective boundary layer. *Nauchn. Trudy (Mosk. Tekhnol. In-t Legkoi Prom.)* vyp. 28, 329 (1963).
- V. S. SOROKIN, On the errors of the paper "Free stream of thin viscous layers on a vertical surface" by B. S. KASIMOV and F. F. ZIGMUND. *Inzh.-Fiz. Zh.* 7, No. 7, 125 (1964).
- YU. K. STASYULYAVICHUS and P. S. SAMOSHKA, Heat transfer between bundles of smooth tubes and air in cross flow with large Re numbers. *Trudy Akad. Nauk Litovsk. SSR. Ser. B*, 4, 77 (1963).
- YU. K. STASYULYAVICHUS, P. S. SAMOSHKA et al., Thermal investigations of a bundle of staggered smooth tubes in cross flow of compressed air. *Trudy Akad. Nauk Litovsk. SSR. Ser. B*, 4, 69 (1963).
- A. V. TEMNIKOV and YE. V. SHCHIBRAEV, The application of the electrothermal analogy for heat transfer investigation in a flow round bodies of an arbitrary shape. *Trudy (Kuibysh. Aviats. In-t)* vyp. 15, p. 2, 229 (1963).

- A. S. TROFIMOV, Allowable rates of temperature change of the heat transferring fluid. *Inzh.-Fiz. Zh.* 7, No. 11, 28 (1964).
- B. A. ZENKEVICH, On the effect of flow velocity of subcooled water on burnout heat fluxes. *Inzh.-Fiz. Zh.* 7, No. 7, 43 (1964).

RADIANT HEAT TRANSFER

YE. V. ARTYUSHKOV, Radiant heat transfer processes between two infinite parallel plates. *Teplofiz. Vysok. Temper.* 2, No. 3, 411 (1964).

A. KH. BERLAND and A. I. CHARUSHNIKOV, The experimental investigation of thermal radiation of water vapour and its mixture with carbon dioxide at high temperatures. *Sb. Nauchn. Trudov (VNII Metallurg. Teplotekhn.)* No. 10, 5 (1963).

L. M. BIBERMAN, V. S. VOROBIEV *et al.*, Radiation heating in a hypersonic flow. *Kosm. Issledovaniya* II, vyp. 3, 441 (1964).

Z. S. GALANOVA, The emissivity of gaseous volumes with arbitrary distribution of parameters. *Vestn. Leningr. Univ. No. 7. Ser. Matem., Mekhan. i Astronom.* vyp. 2, 71 (1964).

A. M. GUREVICH, Heat perception of shields in gaseous furnaces of steam boilers of large power. In: *Teoriya i Praktika Szhigan. Gaza* 2, L., 205 (1964).

A. V. KAVADEROV and YU. A. SAMOLOVICH, On calculations of heating of massive bodies by radiation. *Sb. Nauchn. Trudov (VNII Metallurg. Teplotekhn.)* No. 10, 14 (1963).

A. E. KLEKL, Some peculiarities of heat transfer by radiation. *Sb. Nauchn. Trudov (Nauch.-Issled. i Proektn. In-t Metallurg. Prom. "Giprostal")* vyp. 6, 100 (1964).

M. A. KROPOTKIN and B. P. KOZYREV, Determination of the emissivity of materials from their infra-red reflection spectra. *Inzh.-Fiz. Zh.* 7, No. 9, 108 (1964).

L. I. KUDRYASHEV and I. YU. BERZON, Investigations of combined heat transfer with variable thermal properties and in the presence of radiation. *Trudy (Kuibish. Aviats. In-t)* vyp. 15, p. 2, 25 (1963).

A. F. KURBATSKY and A. T. ONUFRIEV, On radiative cooling of a gas, flowing along a flat plate. *Zh. Prikl. Mekhan. i Tekhn. Fiz.* No. 3, 69 (1964).

V. E. LISTOVNICHY, Calculation of emissive powers of cylindrical cavities. *Inzh.-Fiz. Zh.* 7, No. 11, 32 (1964).

I. R. MIKK, Determination of some characteristics of radiative systems with grey medium. *Trudy Tallinsk. Politekhn. In-ta, Ser. A.*, No. 206, 3 (1963).

I. R. MIKK, Some recommendations for the calculation of heat transfer by radiation in an intertube space. *Trudy Tallinsk. Politekhn. In-ta, Ser. A.*, No. 206, 25 (1963).

I. R. MIKK and T. M. LAUSMAA, Application of some formulae for grey radiation to the calculation of the radiation of gases. (*Soobshchen.*) *Trudy Tallinsk. Politekhn. In-ta, Ser. A.*, No. 206, 75 (1963).

A. A. OTS, Distribution of radiation-intensity of a flame over the depth of a furnace. *Trudy Tallinsk. Politekhn. In-ta, Ser. A.*, No. 206, 45 (1963).

E. L. PODOLSKAYA, On heat transfer and temperature

distribution along a surface of a radiating plate in air flow. *Trudy (Leningr. Gidrometeorol. In-t)* vyp. 18, 167 (1963).

YA. P. STOROZHUK and V. I. ANTONOVSKY, Determination of a semi-spherical radiant flow of a flame by means of a radiometer with a small vision angle. *Inzh.-Fiz. Zh.* 7, No. 7, 87 (1964).

N. A. ZAKHARIKOV and V. P. KONONKO, The influence of the flame luminosity on the heat transfer in a furnace. In: *Teoriya i Praktika Szhigan. Gaza* 2, L., 233 (1964).

V. S. ZARUBIN, Temperature state of a semitransparent spherical shell. *Zh. Prikl. Mekhan. i Tekhn. Fiz.* No. 3, 175 (1964).

TRANSFER PROCESSES INVOLVING PHASE CONVERSIONS

L. D. BERMAN and YU. A. TUMANOV, On the influence of steam velocity on the mechanism and intensity of heat transfer of film condensation on a horizontal pipe. *Energomashinostr.* No. 5, 24 (1964).

L. S. BOBE and S. N. SEMIKHATOV, The calculation of the surface of heat and mass transfer in steam condensation of a two-component mixture. *Khim. Mashinostr.* No. 2, 12 (1964).

G. I. BOBROVICH, I. I. GOGONIN and S. S. KUTATELADZE, The influence of the size of the heating surface on a critical thermal flow in boiling in a large volume of liquid. *Zh. Prikl. Mekhan. i Tekhn. Fiz.* No. 4, 137 (1964).

S. N. BOGDANOV, Heat transfer associated with Freons boiling inside a horizontal pipe. *Kholod. Tekhnika* No. 4, 40 (1964).

V. A. BORODIN, YU. F. DITYAKIN and V. I. YAGODKIN, On the mechanisms of disintegration of a drop, moving in a gas flow. *Zh. Prikl. Mekhan. i Tekhn. Fiz.* No. 3, 100 (1964).

P. I. BYSTROV, The transient temperature field of freezing regions in systems with liquid-metal coolants. *Teplofiz. Vysok. Temper.* 2, No. 3, 429 (1964).

I. P. CHASHCHIN and N. N. NORKIN, Heat transfer of turbulent surfaces with low ribs in condensation. *Izv. Tomsk. Politekhn. In-ta* 112, 112 (1963).

M. YE. DEICH and G. V. TSIKLAURI, The investigation of supercooling and of the structure of the flow of wet steam flowing from convergent nozzles. *Teplofiz. Vysok. Temper.* 2, No. 3, 454 (1964).

YE. A. ERMAKOVA, Some results of the experimental study of ice evaporation in vacuum. *Inzh.-Fiz. Zh.* 7, No. 7, 37 (1964).

V. A. GERTSOVSKY and YU. V. PETROVSKY, Calculations of partial condensation of binary steam mixtures in a vertical reflux condenser. *Khim. Prom.* No. 5, 37 (1964).

A. A. IVASHKEVICH, A model of boiling crisis in forced liquid motion in channels. *Teploenergetika* No. 6, 66 (1964).

YU. N. KALASHNIKOV, The influence of the relative velocity of a gas bubble in liquid on the deformation of its sizes. *Zh. Prikl. Mekhan. i Tekhn. Fiz.* No. 3, 105 (1964).

D. A. KAZENIN, On a possible transfer scheme in a

- boundary layer with a phase-conversion surface. *Inzh.-Fiz. Zh.* 7, No. 11, 22 (1964).
- V. K. KEDRINSKY and G. M. PIGOLKIN, On the stability of a collapsing gas cavity in a rotating liquid. *Zh. Prikl. Mekhan. i Tekhn. Fiz.* No. 3, 113 (1964).
- D. A. LABUNTSOV, B. A. KOLCHUGIN *et al.*, The investigation of bubble growth in boiling of saturated water in a wide range of pressures using a high-speed filming camera. *Teplofiz. Vysok. Temper.* 2, No. 3, 446 (1964).
- A. S. MART'YANOV, Heat transfer at freezing of pulverized water in a flow of cold air. *Trudy Leningr. Korablenstr. In-ta vyp.* 42, 187 (1964).
- V. D. MIKHAILOV and A. I. ABRAMOV, Determination of critical thermal flows for boiling monoisopropylidiphenyl in a pipe. *Izv. Vyssh. Ucheb. Zav. Energetika* No. 7 (1964).
- Z. L. MIROPOLSKY, Pulsations of mass-flow rate in evaporators in the presence of an incompressible fluid in auxiliary elements of the duct line. *Inzh.-Fiz. Zh.* 7, No. 8, 9 (1964).
- V. G. MOROZOV and YU. YU. RYNDIN, Heat-transfer investigation of boiling in annular channels and in interpipe space. *Teploenergetika* No. 7, 64 (1964).
- YE. I. NESIS, On the cause of noise in boiling of liquids and mixtures. *Inzh.-Fiz. Zh.* 7, No. 9, 113 (1964).
- L. M. NIKITINA, The energy of moisture bond and the mass-transfer potential of a substance in a hygroscopic region. *Dokl. Akad. Nauk BSSR* 8, No. 4, 226 (1964).
- YE. N. OVCHINNIKOVA and S. M. BUDUR, The kinetics of evaporation of spherical gel-like bodies in air flow. *Inzh.-Fiz. Zh.* 7, No. 9, 34 (1964).
- M. S. POVARNITSYN, Calculation of temperature and evaporation rates of plane duct walls with internal heat sources with a developed laminar flow. *Inzh.-Fiz. Zh.* 7, No. 11, 36 (1964).
- N. P. SHAMANOV, Some problems in the calculation of circulation in boiling systems. *Trudy Leningr. Korablenstr. In-ta vyp.* 42, 177 (1964).
- V. N. SLESARENKO, The influence of a rotatory movement of a flow on heat transfer at boiling. *Trudy Dalnevost. Politekhn. In-ta* 62, 29 (1964).
- M. A. STYRIKOVICH and YE. I. NEVSTRUEVA, Some new experimental methods of studying the boiling and the crisis boiling mechanisms. *Teplofiz. Vysok. Temper.* 2, No. 3, 437 (1964).
- M. D. VAISMAN and K. S. POLYAKOV, Adiabatic flow of an evaporating liquid. *Inzh.-Fiz. Zh.* 7, No. 8, 20 (1964).
- B. V. YEGOROV, On the approximate estimation of the effect of moisture content (of vapour) on the character of the distribution of flow parameters along the radius in a flow behind nozzles. *Trudy Leningr. Korablenstr. In-ta vyp.* 42, 163 (1964).
- TRANSFER PROCESSES INVOLVING CHEMICAL CONVERSIONS**
- I. YE. AMILOGOV, The dependence of the coefficient in the equation of activated diffusion on activation energy of the internal diffusion of activated carbon of the dissolved substances in grains. *Zh. Fiz. Khim.* 38, No. 5, 1350 (1964).
- V. A. ANDREEV, The influence of temperature, flow velocity and air excess on the ignition and burning of a gas-air mixture in turbulent flow. In: *Teoriya i Praktika Szhigan. Gaza* 2, L., 191 (1964).
- N. A. ANFIMOV, Separation of a gas mixture by diffusion in the presence of dissociation. *Dokl. Akad. Nauk SSSR* 156, No. 6, 1316 (1964).
- V. ARSEEV, A. S. NEVSKY *et al.*, Heat transfer from a flame in cylindrical combustion chambers. In: *Teoriya i Praktika Szhigan. Gaza* 2, L., 245 (1964).
- A. V. ARSEEV, A. S. NEVSKY *et al.*, The influence of the conditions of flame formation on heat transfer. *Sb. Nauchn. Trudov (VNII Metallurg. Teplotekhn.)* No. 10, 134 (1963).
- A. V. ARSEEV, G. G. TRAYANOV and YE. P. BLOKHIN, The investigation results of burners for natural gas. In: *Teoriya i Praktika Szhigan. Gaza* 2, L., 313 (1964).
- S. K. ASLANOV and V. V. KURZHUNOV, The mechanism of vibration combustion of gas mixtures. *Inzh.-Fiz. Zh.* 7, No. 8, 124 (1964).
- A. A. AVDEEVA, Investigations of the conditions of effective combustion with central supply of gas into a swirled air flow. In: *Teoriya i Praktika Szhigan. Gaza* 2, L., 477 (1964).
- V. S. BABKIN, L. S. KOZACHENKO and I. L. KUZNETSOV, The pressure influence on normal flame velocity of a methane-air mixture. *Zh. Prikl. Mekhan. i Tekhn. Fiz.* No. 3, 145 (1964).
- V. V. BARZYKIN, V. T. GONTKOVSKAYA *et al.*, On a transient theory of thermal explosion. *Zh. Prikl. Mekhan. i Tekhn. Fiz.* No. 3, 118 (1964).
- S. BAUER, The chemical kinetics (general introduction) In: Investigation of hypersonic flows. M., 105 (1964).
- A. F. BELYAEV and S. A. TSYGANOV, On the mechanism of burning of smokeless powder at higher pressures. *Dokl. Akad. Nauk SSSR* 157, No. 2, 378 (1964).
- S. G. BESKIN, A study of burners for natural gas in heating installations. In: *Teoriya i Praktika Szhigan. Gaza* 2, L., 342 (1964).
- V. V. BIRYUKOV, Methods for approximate integration of kinetic equations. *Zh. Fiz. Khim.* 38, vyp. 3, 740 (1964).
- V. K. BOBOLEV, A. P. GLAZKOVA *et al.*, An investigation of temperature distribution in burning ammonium perchlorate. *Zh. Prikl. Mekhan. i Tekhn. Fiz.* No. 3, 153 (1964).
- A. F. BOEV, The operation analysis of gas burners for power plant boilers. In: *Teoriya i Praktika Szhigan. Gaza* 2, L., 372 (1964).
- Yu. N. DIAKONOV, Three-dimensional flow round blunt bodies with the assumption of equilibrium physical-chemical reactions. *Dokl. Akad. Nauk SSSR* 157, No. 4, 822 (1964).
- V. A. ELEMA, On a method of extrapolation of thermal data for real gases. *Inzh.-Fiz. Zh.* 7, No. 10, 21 (1964).
- SH. A. ERSHIN and L. P. YARIN, The calculation of a turbulent diffusive flame. In: *Teoriya i Praktika Szhigan. Gaza* 2, L., 123 (1964).
- R. I. ESTERKIN, Conversion of boiler units of industrial thermal electrical stations to gas fuel. In: *Teoriya i Praktika Szhigan. Gaza* 2, L., 528 (1964).

- R. I. ESTERKIN, A. S. ISSERLIN and V. M. TSYPIN, Generalization of experimental data on ejective capacity of burners. In: *Teoriya i Praktika Szhigan. Gaza 2*, L., 433 (1964).
- V. YU. FILINOVSKY and V. A. KIRIANOV, A contribution to the theory of transient convective diffusion for a rotating disk electrode. *Dokl. Akad. Nauk SSSR* **156**, No. 6, 1412 (1964).
- Yu. A. FINAEV, Heating rate of peat particles in combustion. *Inzh.-Fiz. Zh.* **7**, No. 9, 52 (1964).
- S. A. GOLDENBERG, Flame stabilization by counterflowing jets. *Teplofiz. Vysok. Temper.* **2**, No. 3, 344 (1964).
- S. A. GOLDENBERG and L. S. SOLOVIEVA, Flame stabilization by counterflowing jets. In: *Teoriya i Praktika Szhigan. Gaza 2*, L., 91 (1964).
- V. N. IEVLEV and S. A. GOLDENBERG, The investigation of the influence of the intensity of turbulence in a flow of combustible gas mixture on critical ignition conditions by a flame source. In: *Teoriya i Praktika Szhigan. Gaza 2*, L., 48 (1964).
- A. S. ISSERLIN, A turbulent flame stability. In: *Teoriya i Praktika Szhigan. Gaza 2*, L., 111 (1964).
- A. G. ISTRATOV, V. B. LIBROVICH and B. V. NOVOZHILOV, On an approximate method in a theory of transient burning velocity of powder. *Zh. Prikl. Mekhan. i Tekhn. Fiz.* No. 3, 139 (1964).
- D. V. KARPOV, Gas burning in furnaces and dryers of industrial enterprises. In: *Teoriya i Parktika Szhigan. Gaza 2*, L., 547 (1964).
- V. P. KARPOV and A. S. SOKOLIK, Laminar and turbulent flames in the decomposition of hydrazine. *Zh. Fiz. Khim.* **38**, vyp. 6, 1660 (1964).
- Yu. I. KHAVKIN, On the calculation of complete burning of gaseous fuels in combustion chambers of GTI. In: *Teoriya i Praktika Szhigan. Gaza 2*, L., 290 (1964).
- V. A. KHRISTICH, A gas burner with a wide range of performance regulation. In: *Teoriya i Praktika Szhigan. Gaza 2*, L., 328 (1964).
- V. A. KHRISTICH and Yu. N. BASHKATOV, The effect of the pilot burner on stability and complete combustion in the main flame. In: *Teoriya i Praktika Szhigan. Gaza 2*, L., 510 (1964).
- V. A. KHRISTICH and G. N. LYUBCHIK, The diffusion burning of gas jets interacting with air cross streams. In: *Teoriya i Praktika Szhigan. Gaza 2*, L., 79 (1964).
- D. M. KHZMALYAN, T. V. VILENSKY et al., The investigation of ignition of one-dimensional dust-air flow in the presence of a heat removal. *Teploenergetika* No. 8, 67 (1964).
- A. P. KOVALYEV, A. S. IPPOLITOV et al., Flame propagation in laminar and turbulent flows. *Inzh.-Fiz. Zh.* **7**, No. 10, 28 (1964).
- A. P. KOVALYEV and D. M. KHZMALYAN, The aerodynamic aspect of natural gas combustion in thin jets. In: *Teoriya i Praktika Szhigan. Gaza 2*, L., 57 (1964).
- L. I. KUDRYASHEV and R. N. KIROV, The heat-transfer coefficient in terms of external data allowing for chemical transformations. *Trudy Kuibyshev. Aviats. Inst* vyp. 15, p. 2, 191 (1963).
- V. V. KURZHUNOV, Some experimental data on the effect of pressure on the oscillating distribution of a flame in pipes. *Inzh.-Fiz. Zh.* **7**, No. 7, 91 (1964).
- I. L. KUZNETSOV and M. D. MALANOV, On the measurement of the turbulent velocity of flame propagation by the method of a reverse cone. *Zh. Prikl. Mekhan. i Tekhn. Fiz.* No. 4, 132 (1964).
- N. V. LAVROV, Features of the carbon combustion mechanism. *Dokl. Akad. Nauk SSSR* **156**, No. 3, 662 (1964).
- A. M. LEVIN, The investigation and application of infrared radiation gas burners. In: *Teoriya i Praktika Szhigan. Gaza 2*, L., 455 (1964).
- Yu. I. LOBINTSEV, A new aerodynamic and design scheme for ejective burner. In: *Teoriya i Praktika Szhigan. Gaza 2*, L., 445 (1964).
- A. D. MARGOLIN, Interaction of the combustion stages and the anomalous dependence of the rate of combustion on pressure. *Zh. Fiz. Khim.* **38**, vyp. 6, 1599 (1964).
- A. D. MARGOLIN, O. I. NEFEDOVA and P. F. POKHIL, On the dependence of combustion velocity of different fuel systems on initial temperature. *Zh. Prikl. Mekhan. i Tekhn. Fiz.* No. 3, 149 (1964).
- E. I. MAXIMOV and A. G. MERZHANOV, A model representing the burning mechanism in the case of non-volatile explosives. *Dokl. Akad. Nauk SSSR* **157**, No. 2, 412 (1964).
- A. S. NEVSKY, A. V. ARSEEV et al., The experimental determination of heat-transfer coefficients from a flame in cylindrical combustion chambers. *Sb. Nauchn. Trudov (VNII Metallurg. Teplotekhn.)* No. 10, 111 (1963).
- V. A. PALAGIN, Determination of thermistor heat capacities. *Inzh.-Fiz. Zh.* **7**, No. 10, 102 (1964).
- I. I. PALEEV, On simulation of combustion processes. In: *Teoriya i Praktika Szhigan. Gaza 2*, L., 256 (1964).
- M. A. POLYATSKIN and V. P. MENSCHIKOV, Design of gas and combined burners for high-powered boilers. In: *Teoriya i Praktika Szhigan. Gaza 2*, L., 389 (1964).
- M. A. POLYATSKIN and A. A. SHATIL, Burning of natural gas in combustion chambers of gas-turbine plants. In: *Teoriya i Praktika Szhigan. Gaza 2*, L., 565 (1964).
- M. A. POLYATSKIN, Z. M. SVYATSKY et al., Burning natural gas in combustion chambers of high-pressure steam generators. In: *Teoriya i Praktika Szhigan. Gaza 2*, L., 582 (1964).
- K. A. PRIVALOVA, The investigation, calculation and application of uniflow peripheral gas burners. In: *Teoriya i Praktika Szhigan. Gaza 2*, L., 490 (1964).
- S. N. SHORIN, Heat transfer in gas combustion chambers. In: *Teoriya i Praktika Szhigan. Gaza 2*, L., 214 (1964).
- I. A. SHUR, Vertical slotted burners for water-tube boilers. In: *Teoriya i Praktika Szhigan. Gaza 2*, L., 510 (1964).
- I. YA. SIGAL, G. F. NAIDENOV and I. E. KOSTINENKO, Design and calculation of turbulent gas burners. In: *Teoriya i Praktika Szhigan. Gaza 2*, L., 416 (1964).
- A. S. SOKOLIK, V. P. KARPOV and E. S. SEMENOV, Turbulent gas burning. In: *Teoriya i Praktika Szhigan. Gaza 2*, L., 139 (1964).
- V. S. SOLDATOV and G. L. STAROBINETS, On the thermodynamics of the ion exchange on sulfonated styrene-

- divinylbenzene copolymers, II. *Zh. Fiz. Khim.* **38**, vyp. 3, 681 (1964).
- V. A. SPEISHER, The intensification of the combustion process of low-calorific gases. In: *Teoriya i Praktika Szhigan. Gaza* **2**, L., 176 (1964).
- G. A. TIRSKY, A contribution to the theory of a multi-component laminar boundary layer on a chemically active surface. *Dokl. Akad. Nauk SSSR* **156**, No. 4, 756 (1964).
- I. A. VAINSHTEIN, Investigation of turbulent combustion *Sb. Nauchn. Trudov (Nauchn.-Issled. i Proekt. In-t Metallurg. Prom. "Giprostal")* vyp. 6, 106 (1964).
- R. M. VARUSHCHENKO and G. L. GALCHENKO, Combustion heats of trial-kylborons. II. *Zh. Fiz. Khim.* **38**, vyp. 6, 1474 (1964).
- A. K. VNUKOV, Burning natural gas in power plants. In: *Teoriya i Praktika Szhigan. Gaza* **2**, L., 517 (1964).
- L. A. VULIS, Some physical problems of combustion. In: *Teoriya i Praktika Szhigan. Gaza* **2**, L., 156 (1964).
- I. A. YAVORSKY and M. S. ORENBALKH, Ed., The kinetics of combustion fuels (Collected papers). *Izd. Sib. Otdel. Akad. Nauk SSSR, Novosibirsk* (1963).
- YA. B. ZELDOVICH, On the velocity of combustion of powder at variable pressures. *Zh. Prikl. Mekhan. i Tekhn. Fiz.* No. 3, 126 (1964).
- A. P. ZINOVIEVA, Integral kinetic equations of a chemical reaction coupled with mass transfer. *Khim. i Tekhnol. Topliv i Masel* No. 7, 6 (1964).

MASS TRANSFER

- U. TS. ANDRES and L. S. POLYAK, Measurement of electromagnetic extrusion from an electrically conducting liquid. *Inzh.-Fiz. Zh.* **7**, No. 8, 121 (1964).
- D. K. BELASHCHENKO, On a possible mechanism for thermodiffusion in metallic solutions. *Zh. Fiz. Khim.* **38**, vyp. 3, 565 (1964).
- A. G. BEZUS, V. P. DREVING and A. V. KISELEV, Adsorption energy of ethane and ethylene on surfaces of varying nature. II. *Zh. Fiz. Khim.* **38**, vyp. 4, 947 (1964).
- A. F. BOGOMOLOVA and V. M. GLAZOVA, The mobility of residual water in a laminated porous medium. *Izv. Akad. Nauk SSSR. Mekhan. i Mashinostr.* No. 4, 180 (1964).
- L. B. BODRETSOVA, Solution of a diffusion problem in conditions of a variable temperature. *Matem. Sborn.* **64**, No. 2, 223 (1964).
- YU. A. BUEVICH, Diffusion processes at interfacial boundaries. *Zh. Fiz. Khim.* **38**, vyp. 3, 658 (1964).
- V. N. DILIGENSKY, Geometric characteristics of a diffusive turbulent flame, developing in a counterflow of air. *Trudy (Kuibyshev. Aviats. In-t)* vyp. 15, p. 2, 237 (1963).
- V. N. DILIGENSKY, On the determination of the sizes of diffusive turbulent flames, developing in still air. *Trudy (Kuibyshev. Aviats. In-t)* vyp. 15, p. 2, 371 (1963).
- M. F. FEDOROVA and A. N. ALIEV, The isotherms of gas adsorption on silica gel at low temperatures in the pressure range 10^{-8} – 10^{-2} mm Hg. *Zh. Fiz. Khim.* **38**, vyp. 4, 989 (1964).
- V. S. GOLUBEV and G. M. PANICHENKOV, Determination of the diffusion mechanism controlling the rate of sorption. *Zh. Fiz. Khim.* **38**, vyp. 4, 1010 (1964).
- B. A. IVAKIN and P. E. SUETIN, Investigation of the temperature dependence of the diffusion coefficients of gases. *Zh. Tekhn. Fiz.* **34**, vyp. 6, 1115 (1964).
- G. A. KARDASHEV, Contribution to the theory of acoustic diffusion. *Inzh.-Fiz. Zh.* **7**, No. 7, 96 (1964).
- N. YE. KHAZANOVA and M. V. KAL'SINA, Diffusion in three component solutions near the critical separation point. *Zh. Fiz. Khim.* **38**, No. 5, 1223 (1964).
- A. N. KIRGINSEV and E. G. AVVAKUMOV, On the dependence of the separation coefficient on concentration. *Fiz. Tverd. Tela* **6**, vyp. 5, 1547 (1964).
- N. N. KOCHINA, A particular solution of a nonlinear diffusion equation. *Prikl. Matem. i Mekhan.* **28**, vyp. 4, 699 (1964).
- L. A. KOZDOBA and V. I. KRYLOVICH, Some results of investigation of the temperature field in cooled elements of an electrical-arc heater using combined electrical models. *Inzh.-Fiz. Zh.* **7**, No. 9, 78 (1964).
- V. I. NIKITIN, Thermal mass transfer in liquid sodium. *Zh. Fiz. Khim.* **38**, No. 5, 1210 (1964).
- I. G. PLIT, A mass-transfer theory in concentrated flows of drops of large diameter. *Zh. Prikl. Khim.* **37**, vyp. 6, 1301 (1964).
- E. RUCKENSTEIN, The influence of the Marangoni effect on mass transfer in film boiling. *Inzh.-Fiz. Zh.* **7**, No. 7, 116 (1964).
- P. YE. SUYETIN and B. A. IVAKIN, A particular problem of three-component diffusion. *Zh. Fiz. Chim.* **38**, No. 3, 576 (1964).
- P. YE. SUYETIN and P. M. VOLOBUEV, Baroeffect in interdiffusion of gases. *Zh. Tekhn. Fiz.* **34**, vyp. 6, 1107 (1964).
- G. A. TIRSKY, Determination of the effective coefficients of diffusion in the laminar boundary layer of many components. *Dokl. Akad. Nauk SSSR* **155**, No. 6, 1278 (1964).
- M. V. VOLK-LEVANOVICH, Measurement of temperature of an alternating-current arc by self-reversing spectrum lines. *Inzh.-Fiz. Zh.* **7**, No. 10, 98 (1964).

SIMULTANEOUS HEAT AND

MASS TRANSFER

- O. B. DENISOV, On some views on internal heat and mass transfer processes, taking place in contact heating of flat wood materials. *Trudy (Sib. Tekhn. In-t) Sb.* **36**, 129 (1963).
- N. I. GAMAYUNOV, Heat and mass transfer in anisotropic bodies. *Inzh.-Fiz. Zh.* **7**, No. 8, 43 (1964).
- YU. V. LAPIN, The turbulent heat and mass transfer on a plate in the presence of sublimation and porous supply of different gases. *Zh. Tekhn. Fiz.* **34**, vyp. 5, 913 (1964).
- SH. N. PLYAT and L. B. SAPOZHNIKOV, Temperature distribution in building concrete. *Inzh.-Fiz. Zh.* **7**, No. 7, 65 (1964).
- YA. S. RABINOVICH, A particular mathematical problem of heat and mass transfer. *Inzh.-Fiz. Zh.* **7**, No. 11, 67 (1964).

- I. B. STECHKINA, Diffusion to a cylinder at small Reynolds and Péclet numbers. *Inzh.-Fiz. Zh.* 7, No. 8, 128 (1964).
- A. G. TEMKIN, Reconstruction of heat and mass content fields of a colloid capillary-porous body. *Inzh.-Fiz. Zh.* 7, No. 10, 85 (1964).
- K. K. VASILEVSKY, An approximate solution of a non-linear transient heat- and mass-transfer problem for a semilimited porous body. *Teplofiz. Vysok. Temper.* 2, No. 2, 260 (1964).
- ### AEROHYDRODYNAMICS
- M. T. ABASOV and S. I. ALEKPEROVA, On displacement of some fluid by another in a non-homogeneous layer. *Inzh.-Zh.* 4, vyp. 3, 470 (1964).
- V. YE. AEROV and B. I. FEDOROV, Measurements of turbulent nonisothermal flows. *Trudy Leningr. Politekhn. In-ta* No. 230, 139 (1964).
- YE. F. AFANASIEV, Weak shock wave action on some obstacle. *Inzh. Zh.* 4, vyp. 3, 451 (1964).
- L. N. ALEKSANDROV, The experimental investigation of flow turbulence in a boundary area in a region of a sudden lateral expansion. *Izv. VNII Gidrotekhn.* 73, 233 (1963).
- B. V. ALEKSEEV, A laminar boundary layer on a sublimating surface. *Zh. Vychisl. Matem i Matem. Fiz.* 4, No. 3, 512 (1964).
- F. ALIEV, The effect of the initial mass-flow rate on development of a submerged non-isothermal round jet in an incompressible fluid. *Inzh.-Fiz. Zh.* 7, No. 10, 106 (1964).
- R. Z. ALIEV and V. YA. DEMIN, The calculation of a laminar boundary layer with discontinuous suction. *Trudy Leningr. Politekhn. In-ta* No. 230, 49 (1964).
- R. Z. ALIMOV, On a particular stable shape of a free surface of a thin layer of rotating liquid. *Dokl. Akad. Nauk SSSR* 157, No. 6, 1314 (1964).
- V. V. ANISIMOV and R. V. KHOKHLOV, On shock waves formed in a viscous gas flow around thin profiles. *Prikl. Matem. i Mekhan.* 28, vyp. 3, 557 (1964).
- V. S. ANTSIFEROV and KH. A. RAKHMATULIN, Propagation of compressing-displacing perturbations in a non-linear-elastic medium. *Prikl. Matem. i Mekhan.* 28, vyp. 3, 572 (1964).
- V. M. ANTUFIEV, The relation between heat transfer and resistance and the heating surface. *Inzh.-Fiz.* 7, No. 11, 3 (1964).
- I. M. ASTRAKHAN, Some solutions of boundary layer equations in viscous plastic liquid. *Trudy Mosk. In-ta Neftekhim. i Gaz. Prom.* vyp. 46, 94 (1964).
- V. M. BAGIN, On a hollow vortex in a channel. *Izv. Akad. Nauk SSSR. Mekhan. i Mashinostr.* No. 4, 129 (1964).
- V. I. BAKULEV, Calculation of the main portion of an axi-symmetric turbulent jet of real gas. *Inzh.-Fiz. Zh.* 7, No. 10, 14 (1964).
- V. B. BALAKIN, A method of counting discontinuous solutions of gas dynamic equations. II. *Inzh.-Fiz. Zh.* 7, No. 11, 62 (1964).
- B. A. BALANIN, A study of pressure changes along the side walls and end face of the Eiffel chamber of a supersonic wind-tunnel. *Vestn. Leningr. Univ. Ser. Matem., Mekhan. i Astronom.* No. 13, vyp. 3, 85 (1964).
- A. P. BAZZHIN, Calculation of flow near the lower surface of delta wings for large angles of attack. *Inzh. Zh.* 4, vyp. 2, 242 (1964).
- S. M. BELOTSERKOVSKY, B. K. SKRIPACH and V. G. TABACHNIKOV, On the determination of the coefficients of rotary derivatives in wind tunnels. *Izv. Akad. Nauk SSSR. Mekhan. i Mashinostr.* No. 3, 21 (1964).
- A. V. BELOVA and G. G. MAXIMOVA, The transient problem of the jet dissipation. *Vestn. Leningr. Univ. Ser. Matem., Mekhan. i Astronom.* No. 13, vyp. 3, 75 (1964).
- A. A. BOKSERMAN, YU. P. ZHELTOV and A. A. KOCHESHKOV, The motion of non-mixing liquids through a porous medium with cracks. *Dokl. Akad. Nauk SSSR* 155, No. 6, 1282 (1964).
- YE. N. BONDAREV, The approximate estimation of the influence of a turbulent boundary layer and of the ratios of specific heats on a given pressure behind a flat step. *Izv. Akad. Nauk SSSR. Mekhan. i Mashinostr.* No. 3, 166 (1964).
- K. A. BREUS, Some problems of transitional inertia motion of an ideal liquid. *Ukr. Matem. Zh.* 16, No. 1, 72 (1964).
- DZHV. V. BUACHIDZE, On the investigation of the aerodynamics of flows in low pressure injection burners. *Trudy In-ta Energetiki (AN Gruz. SSR)* 17, 257 (1963).
- V. A. BUBNOV, Automodel motions in a thermal boundary layer. *Trudy Leningr. Politekhn. In-ta* No. 230, 70 (1964).
- V. A. BUBNOV and K. I. GRISHMANOVSKAYA, On accurate solutions of non-isothermal boundary layer problems in incompressible liquid. *Trudy Leningr. Politekhn. In-ta* No. 230, 77 (1964).
- B. M. BULAKH, On higher approximations in boundary layer theory. *Prikl. Matem. i Mekhan.* 28, vyp. 3, 548 (1964).
- F. S. CHURIKOV, On the integration of equations of hydraulic shock theory. *Izv. Akad. Nauk SSSR. Mekhan. i Mashinostr.* No. 2, 176 (1964).
- G. A. KOLTON, The flow of a radiating gas near the stagnation point of a blunt-nosed body. *Vestnik Leningr. Univ. Ser. Matem., Mekhan. i Astronom.* No. 13, vyp. 3, 103 (1964).
- M. YE. DEICH and G. V. TSIKLAURI, Diverging characteristics of narrowing axisymmetric nozzles for superheated and wet steam. *Izv. Akad. Nauk SSSR. Energetika i Transport* No. 3, 383 (1964).
- YU. N. D'YAKONOV, The dimensional flow around blunt bodies of a supersonic stream of perfect gas. *Izv. Akad. Nauk SSSR. Mekhan. i Mashinostr.* No. 4, 150 (1964).
- V. G. DULOV, On equations of steady axisymmetric gas flows with variable "pressure—the function of current". *Zh. Prikl. Mekhan. i Tekhn. Fiz.* No. 3, 164 (1964).
- N. V. DUSHIN, Conformal-Euclidean representation of Riemannian spaces and hydrodynamic equation. *Trudy Leningr. Politekhn. In-ta* No. 230, 27 (1964).
- I. T. EPERIN, D. M. GALERSHTEIN and L. I. LEVENTAL, The effect of surface phenomena and of the unsteady

- state on transfer processes in heterogeneous systems. *Inzh.-Fiz. Zh.* 7, No. 8, 16 (1964).
- V. M. ELTERMAN, On the validity of laws for thermal jets. *Nauchn. Raboty In-tov Truda VTS SPS* vyp. 6, 3 (1963).
- I. Z. FISHER, Comments on the kinetic theory of liquids. *Zh. Fiz. Khim.* 38, vyp. 3, 778 (1964).
- A. S. FONAREV, The method of numerical calculation and solution of a problem of distintegration of a flat gas layer with a gradual irregular energy release. *Zh. Vychisl. Matem. i Matem. Fiz.* 4, No. 3, 604 (1964).
- A. P. FROLOV, A flat slightly distorted jet of an ideal incompressible liquid. *Prikl. Matem. i Mekhan.* 28, vyp. 3, 564 (1964).
- N. A. FUFAEV, On the possibility of realization of non-holonomic bond by means of viscous friction forces. *Prikl. Matem. i Mekhan.* 28, vyp. 3, 513 (1964).
- M. S. GABRIELYAN, Stabilization of unstable motions of mechanical systems. *Prikl. Matem. i Mekhan.* 28, vyp. 3, 493 (1964).
- S. M. GILINSKY, G. F. TELENIN and G. P. TINYAKOV, The calculation method of supersonic flow round blunt bodies with a detached shock wave. *Izv. Akad. Nauk SSSR. Mekhan. i Mashinostr.* No. 4, 9 (1964).
- I. P. GINZBURG, The relation between the heat content and velocity in a boundary layer gas flow. *Inzh.-Fiz. Zh.* 7, No. 8, 64 (1964).
- I. P. GINZBURG, G. V. KOCHERYZHENKOV and N. I. MORDVINNOVA, The turbulent boundary layer on the permeable flat plate. *Vestn. Leningr. Univ. Ser. Matem., Mekhan. i Astronom.* No. 13, vyp. 3, 89 (1964).
- A. I. GOLUBINSKY, The motion of the shock wave along a wedge, travelling with supersonic velocity. *Prikl. Matem. i Mekhan.* 28, vyp. 4, 778 (1964).
- G. A. GOSHEV, A theory of a carrying line of a hydrofoil of an arbitrary shape on shoal. *Izv. Akad. Nauk SSSR. Mekhan. i Mashinostr.* No. 3, 29 (1964).
- S. N. GRINEVA, Calculation of flow past blunt solids of revolution with an angular point. *Inzh. Zh.* 4, vyp. 3, 439 (1964).
- E. P. IVANOV, On automodel jet solutions of boundary layer equations. *Trudy Leningr. Politekhn. In-ta* No. 230, 84 (1964).
- E. P. IVANOV, Propagation of a laminar swirled jet in an accelerated flow. *Trudy Leningr. Politekhn. In-ta* No. 230, 90 (1964).
- S. M. KAPUSTYANSKY, Approximate calculation methods of a laminar boundary layer in a gas flow. *Trudy Leningr. Politekhn. In-ta* No. 230, 111 (1964).
- Yu. YE. KARYAKI, A flow about a circular lattice of circles. *Trudy Leningr. Politekhn. In-ta* No. 230, 21 (1964).
- V. V. KELDYSH, Flow past ducted bodies with plane- and cone-shaped obstacles. *Inzh. Zh.* 4, vyp. 3, 539 (1964).
- U. D. KHERZ, Vortex flows of non-viscous fluid near the critical point. *Prikl. Matem. i Mekhan.* 28, vyp. 4, 684 (1964).
- V. I. KHOLYAVKO, Hypersonic gas flow round a blunted-edged plate with a small angle of attack. *Izv. Akad. Nauk SSSR. Mekhan. i Mashinostr.* No. 2, 19 (1964).
- N. V. KIENTOV, Propagation of a flat laminar jet of incompressible liquid along a solid wall. *Trudy (Kuibysh. Aviats. In-t)* vyp. 15, p. 2, 53 (1963).
- N. V. KIENTOV, The application of the source method for the investigation of return flows in a group of nozzles with an interaction of jets with a wall. *Trudy (Kuibysh. Aviats. In-t)* vyp. 15, p. 2, 73 (1963).
- A. I. KOBZAR, YE. I. YANTOVSKY and I. M. TOLMACH, Two-phase mixture flows in a channel of a variable cross-section. *Izv. Akad. Nauk SSSR. Energetika i Transport* No. 4, 522 (1964).
- P. P. KORYAVOV, The numerical calculation of turbulent mixing of two homogeneous gas streams. *Zh. Vychisl. Matem. i Matem. Fiz.* 4, No. 3, 495 (1964).
- S. I. KOSTERIN and YU. P. FINATIEV, Prediction of the hydraulic resistance of annular ducts. *Inzh.-Fiz. Zh.* 7, No. 10, 6 (1964).
- L. F. KOZLOV, The approximate calculation method of optimum suction of liquid from a boundary layer of wing profiles with porous surface. *Zh. Prikl. Mekhan. i Tekhn. Fiz.* No. 3, 169 (1964).
- L. I. KUDRYASHEV and V. K. LYAKHOV, The analytical investigation of the effect of the changes of thermal liquid properties in a turbulent nonisothermal flow in pipes. *Trudy (Kuibysh. Aviats. In-t)* vyp. 15, p. 2, 225 (1963).
- L. A. KULONEN, A particular integration method of laminar boundary layer equations in incompressible liquid. *Zap. Leningr. Gorn. In-t* 43, vyp. 3, 94 (1964).
- L. A. KULONEN, Numerical solution of laminar boundary layer problem on the bodies of revolution. *Vestn. Lebingr. Univ. Ser. Matem., Mekhan. i Astronom.* No. 7, vyp. 2, 91 (1964).
- L. A. KULONEN, On the calculation of laminar boundary layer on bodies of revolution in binary gaseous flow. *Zap. Leningr. Gorn. In-t* 43, vyp. 3, 80 (1964).
- A. V. KUZNETSOV, On the problem of jet flow round a contour subjected to small oscillations. *Prikl. Matem. i Mekhan.* 28, vyp. 3, 567 (1964).
- Yu. V. LAPIN and G. P. SERGEEV, The dissociation effect on friction and heat transfer in a turbulent boundary layer. *Trudy Leningr. Politekhn. In-ta* No. 230, 98 (1964).
- A. I. LASHKOV, Compressibility effect on the resistance of exhaust diffusers *Inzh. Zh.* 4, vyp. 3, 551 (1964).
- I. M. LIFSHITS and V. B. SHIKIN, Diffusion-viscous flow of porous solids. *Fiz. Tverd. Tela* 6, vyp. 6, 1735 (1964).
- I. L. LOITSYANSKAYA, The possibility of theoretical calculation of geometric parameters of lattice profiles applied to reversible hydro units. *Izv. Akad. Nauk SSSR. Mekhan. i Mashinostr.* No. 4, 165 (1964).
- L. G. LOITSYANSKY, Motions in a boundary layer, near to automodel. *Trudy Leningr. Politekhn. In-ta* No. 230, 59 (1964).
- Yu. P. LUNKIN and M. P. SHTENGEL, The effect of non-equilibrium dissociation on the flow around blunt bodies. *Trudy Leningr. Politekhn. In-ta* No. 230, 7 (1964).
- V. K. LYAKHOV, The dependence of the heat-transfer coefficients and the hydraulic resistance on a degree of non-isothermal state along and across a turbulent

- stream of liquid in closed boundary conditions. *Trudy (Kuibyshev. Aviats. In-t)* vyp. 15, p. 2, 151 (1963).
- D. N. LYAKHOVSKY, The turbulence in uniflow and swirled jets. In: *Teoriya i Praktika Szhigan. Gaza 2*, L., 18 (1964).
- G. I. MAIKAPAR, One-dimensional flow of viscous fluid between two cylindrical walls. *Izv. Akad. Nauk SSSR. Mekhan. i Mashinostr.* No. 2, 175 (1964).
- G. I. MAIKAPAR, Viscous fluid flow near the angular points of a contour of a solid. *Izv. Akad. Nauk SSSR. Mekhan. i Mashinostr.* No. 3, 16 (1964).
- A. I. MIKHAILOV, E. K. KALININ and G. A. DREITSER, Flow resistance of a bundle of staggered tubes in longitudinal air flow. *Inzh.-Fiz. Zh.* 7, No. 11, 42 (1964).
- V. I. MARON, An established laminar viscous fluid motion in a pipe. *Izv. Vyssh. Ucheb. Zav. Neft i Gaz*, No. 6, 59 (1964).
- P. M. MUSHENKO, The determination of the characteristics of atmospheric turbulence from condensation tracks (a diffusive method). *Trudy (Leningr. Gidrometeorol. In-t)* vyp. 14, 153 (1963).
- YE. I. NEFEDOV and M. G. KHUBLARYAN, The flow of an axisymmetric spiral stream through a channel of a given profile. *Izv. Akad. Nauk SSSR. Mekhan. i Mashinostr.* No. 3, 173 (1964).
- V. YA. NEILAND and L. A. SOKOLOV, Base pressure behind the wedge under the angle of incidence in supersonic gas flow. *Inzh. Zh.* 4, vyp. 2, 247 (1964).
- N. I. NIKITENKO, The calculation method of the unsteady field of velocity and pressure in a flow of liquid. *Izv. Vyssh. Ucheb. Zav. Energetika* No. 6, 76 (1964).
- A. K. NIKITIN and A. A. PODREZOV, On a three-dimensional problem of waves on a surface of a viscous fluid of infinite depth. *Prikl. Matem. i Mekhan.* 28, vyp. 3, 452 (1964).
- O. N. OVCHINNIKOV, Slow stream of incompressible viscous fluid near a penetrable elliptical envelope. *Trudy Leningr. Politekhn. In-ta* No. 230, 36 (1964).
- O. N. OVCHINNIKOV, An established flow of viscous fluid near a permeable plate. *Izv. Akad. Nauk SSSR. Mekhan. i Mashinostr.* No. 2, 24 (1964).
- A. S. PLESHANOV, Passage of a non-equilibrium gas through the critical cross-section of a nozzle. *Dokl. Akad. Nauk SSSR.* 158, No. 1, 74 (1964).
- N. I. POLSKY, Adiabatic flows of a conductive gas in channels. *Teplofiz. Vysok. Temper.* 2, No. 2, 238 (1964).
- A. A. POMERANTSEV, The pattern of the onset of shock waves in supersonic flows of rarefied gases. *Inzh.-Fiz. Zh.* 7, No. 8, 59 (1964).
- Yu. B. PONOMARENKO, On a particular kind of stationary motion in hydrodynamics. *Prikl. Matem. i Mekhan.* 28, vyp. 4, 688 (1964).
- B. V. PUSTOVOIT, Losses of head in transient and turbulent fluid motion in round pipes. *Izv. Vyssh. Ucheb. Zav. Energetika* No. 6, 87 (1964).
- Yu. P. RAIZER, On the divergence of a gaseous cloud in vacuum. *Zh. Prikl. Mekhan. i Tekhn. Fiz.* No. 3, 162 (1964).
- V. R. RYBIN and V. D. SHIROKIKH, On non-stationary perfect fluid flow along round pipelines of variable cross-section. *Nauchn. Raboty In-ov Okhrany Truda VTsSPS* vyp. 5, 9 (1963).
- O. V. RYSEV, Some peculiarities of the disintegration of a gas sphere in vacuum. *Inzh. Zh.* 4, vyp. 3, 543 (1964).
- Yu. V. RZHEZNICKOV and E. A. BOITSOVA, On the conditions of disturbance of the flow stability of a jet flowing along the wall of a flat channel with convex walls. *Izv. Akad. Nauk. SSSR. Mekhan. i Mashinostr.* No. 3, 168 (1964).
- R. B. SALIMOV, On solvability conditions of the basic treatment of an aerohydromechanic problem. *Trudy Kazansk. Aviats. In-ta* vyp. 80, 64 (1963).
- YA. G. SAPUNKOV, A supersonic flow of equilibrium gas around a circular cone under the angle of attack. *Izv. Akad. Nauk SSSR. Mekhan. i Mashinostr.* No. 4, 4 (1964).
- YE. V. SEMENOV, A particular problem of a hydrodynamic stability theory in a case of variable viscosity. *Izv. Akad. Nauk SSSR. Mekhan. i Mashinostr.* No. 4, 161 (1964).
- N. I. SEMENOV and S. I. KOSTERIN, The results of study of acoustic velocity in moving gas-fluid mixtures. *Teploenergetika* No. 6, 46 (1964).
- S. I. SERGEEV, On a carrying capacity of a thin gas layer or cavitating liquid. *Izv. Akad. Nauk SSSR. Mekhan. i Mashinostr.* No. 4, 172 (1964).
- E. V. SERGENEVA, On the calculation of a vertical profile of the turbulence coefficient in a boundary layer by a graphical method. *Trudy (Leningr. Gidrometeorolog. In-t)* vyp. 18, 124 (1963).
- I. F. SHAKHNOV, Non-adiabatic supersonic flow of ideal gas around a flat plate. *Izv. Akad. Nauk SSSR. Mekhan. i Mashinostr.* No. 4, 154 (1964).
- S. N. SHORIN and A. B. PRISELKOV, Turbulent and molecular mixing in jet flow. In: *Teoriya i Praktika Szhigan. Gaza 2*, L., 5 (1964).
- Z. P. SHULMAN and B. M. BERKOVSKY, An approximate method for calculation of a laminar boundary layer on a penetrable curved surface. *Inzh.-Fiz. Zh.* 7, No. 8, 131 (1964).
- A. I. SHVETS, Supersonic flow around ellipsoids. *Izv. Akad. Nauk SSSR. Mekhan. i Mashinostr.* No. 4, 29 (1964).
- S. V. SIMEONOV, Some solution methods of non-linear problems of the mechanics of a deformable body. *Prikl. Matem. i Mekhan.* 28, vyp. 3, 418 (1964).
- L. M. SIMUNI, Transient motion of viscous fluid in a lubricating bed. *Trudy Leningr. Politekhn. In-ta* No. 230, 30 (1964).
- L. M. SIMUNI, Numerical solution of some problems of viscous fluid motion. *Inzh. Zh.* 4, vyp. 3, 446 (1964).
- YA. A. SIROTKIN, Contribution to the formulation of two-dimensional problems of compressible fluid vortex flow in turbo-machines. *Inzh. Zh.* 4, vyp. 2, 254 (1964).
- N. V. SMIRNOV, Conical flows of ideal incompressible fluid. *Vestn. Leningr. Univ. Ser. Matem., Mekhan. i Astronom.* No. 7, vyp. 2, 107 (1964).
- V. A. SMIRNOV, Form-parameters of density profiles and velocity profiles in free-convective boundary layers. *Nauchn. Trudy (Mosk. Tekhnol. In-t Legkoi Prom.)* vyp. 28, 317 (1963).
- Yu. N. SMYSLOV, Longitudinal flow around a plate with

- injection of electroconductive gas through a surface in the presence of a magnetic field. *Trudy Leningr. Politekhn. In-ta* No. 230, 54 (1964).
- K. P. STANYUKOVICH, Some approximate methods of integration of equations of plane potential gas flow. *Inzh. Zh.* 4, vyp. 2, 318 (1964).
- A. I. STARSHINOV, Experimental investigation of the initial stages of formation of a stream. *Vestn. Leningr. Univ. Ser. Matem., Mekhan. i Astronom.* No. 13, vyp. 3, 110 (1964).
- Yu. K. STASYULYAVICHYUS and P. S. SAMOSHKA, Heat transfer and aerodynamics of staggered tube bundles in an air crossflow within the range of $Re > 10^5$. *Inzh.-Fiz. Zh.* 7, No. 11, 10 (1964).
- Yu. K. STASYULYAVICHYUS and P. S. SAMOSHKA, The aerodynamic resistance of bundles of staggered smooth-tubes in a cross air flow for large Re numbers. *Trudy Akad. Nauk Litovsk. SSR. Ser. B*, No. 4, 83 (1963).
- K. P. SUROVIKHKH, Group classification of the equations describing one-dimensional unsteady motion of gas. *Dokl. Akad. Nauk SSSR* 156, No. 3, 533 (1964).
- M. P. TETERIN, Turbulent boundary layer of a free jet of compressible gas in a co-current and counter flows. *Inzh. Zh.* 4, vyp. 2, 330 (1964).
- V. A. TETYUEV, On a structure of laminar isothermal and nonisothermal liquid flows. *Sborn. Nauchn. Trudov (Perm. Politekhn. In-t)* No. 13, 71 (1963).
- A. I. TOLSTYKH, On a structure of a curvilinear shock wave. *Prikl. Matem. i Mekhan.* 28, vyp. 3, 553 (1963).
- V. V. USANOV, The relation between heat transfer and resistance in a transonic region. *Inzh.-Fiz. Zh.* 7, No. 10, 3 (1964).
- B. P. USTIMENKO and T. P. LEONTIEVA, Aerodynamics of a counterflow gas flame. In: *Teoriya i Praktika Szhigan. Gaza* 2, L., 67 (1964).
- B. P. USTIMENKO and V. N. ZMEIKOV, On the hydrodynamics of flow in an annulus channel with the rotating internal cylinder. *Teplofiz. Vysok. Temper.* 2, No. 2, 250 (1964).
- S. V. VAKHLOMOV, Prediction of a jet path in a lateral stream. *Inzh.-Fiz. Zh.* 7, No. 10, 112 (1964).
- V. V. YAKOVENKO, The influence of a vortex track on a flow around a thick profile in transitional motion. *Trudy Leningr. Politekhn. In-ta* No. 230, 13 (1964).
- O. V. YAKOVLEVSKY, On a particular approximate solution method of jet problems. *Izv. Akad. Nauk SSSR. Mekhan. i Mashinostr.* No. 4, 169 (1964).
- O. V. YAKOVLEVSKY and A. N. SEKUNDOV, Fluid flows, induced by turbulent jets. *Izv. Akad. Nauk SSSR. Mekhan. i Mashinostr.* No. 3, 39 (1964).
- V. M. YENTOV, On an approximate solution of plane radial problems of unsteady filtration. *Izv. Akad. Nauk SSSR. Mekhan. i Mashinostr.* No. 4, 33 (1964).
- Sh. A. YERSHIN, A problem of a flat laminar stream of viscous compressible gas. *Inzh. Zh.* 4, vyp. 3, 461 (1964).
- V. I. YUDOVICH, A problem of two-dimensional transient flow of ideal incompressible fluid through a given region. *Matemat. Sborn.* 64, No. 4, 562 (1964).
- V. YE. ZAKHAROV, On the evolution of a wave packet in hydrodynamics with sound dispersion. *Zh. Prikl. Tekhn. Fiz.* No. 3, 167 (1964).
- V. N. ZHIGULEV, Motion equations of non-equilibrium medium with radiation. *Inzh. Zh.* 4, vyp. 2, 231 (1964).
- V. N. ZHIGULEV, On the equations of motion of non-equilibrium medium with radiation. *Inzh. Zh.* 4, vyp. 3, 431 (1964).
- P. P. ZOLOTAREV, On the propagation of weak perturbations in mixtures. *Izv. Akad. Nauk SSSR. Mekhan. i Mashinostr.* No. 4, 178 (1964).

DRYING PROCESSES

- G. M. BALABAEV and S. G. ROMANOVSKY, The peculiarities of the kinetics of the drying process of moist wood materials in electromagnetic chambers. *Sudostroyenie* No. 2, 44 (1964).
- M. I. BEILIN and A. M. STEPANENKO, Investigations of the drying process of common salt in a fluidized bed. *Sb. Nauchn. Trudov (Ukr. NII Solyan. Prom.)* vyp. 7, 111 (1964).
- M. S. BELOPOLSKY, The analytical investigation of stress in a drying process of ceramic samples. *Trudy (VNII Stroit. Keramiki)* vyp. 23, 65 (1964).
- A. A. DOLINSKY, Peculiarities of the kinetics of high-temperature drying of a droplet in a colloidal solution *Inzh.-Fiz. Zh.* 7, No. 7, 33 (1964).
- A. P. FOKIN, *Pulverizing Dryers*. Moscow (1964).
- R. I. GAVRILOVA, Kinetics of the drying process with variable heat- and mass-transfer coefficients. *Inzh.-Fiz. Zh.* 7, No. 8, 37 (1964).
- V. M. KAZANSKY, Specific heat of evaporation of moisture from some natural polymers. *Inzh.-Fiz. Zh.* 7, No. 7, 53 (1964).
- G. N. KHARITONOV and V. A. RASPOPOV, Remote control of the operating conditions of drying wood. *Derevoobratst. Prom.* No. 4, 4 (1964).
- N. D. KHOMUTSKY, The investigation of relative drying velocity of coarse-stem fibrous materials. *Izv. Vyssh. Ucheb. Zav. Tekhnol. Tekstiln. Prom.* No. 1, 32 (1964).
- M. V. KRASNOSELSKY and M. M. PETROV, Conveyer dryers for large articles. *Mashinostr.* No. 2, 7 (1964).
- R. N. KRIMER, G. V. TSVELENEVA and A. G. DYNKINA, The accelerated drying method of large-gabarit porcelain insulators. *Steklo i Keramika* No. 7, 28 (1964).
- B. S. KRYLOV, B. I. PYATACHKOV and T. M. ROMANOVA, Main factors controlling drying of insulating peat slabs. *Inzh.-Fiz. Zh.* 7, No. 10, 56 (1964).
- P. S. KUTS, The analysis of thermochemical tests and the optimum drying operating conditions of peat plates. *Prom. Belorussii* No. 6, 20 (1964).
- M. D. KUZNETSOV, Z. G. LYANNAYA et al., Drying of carbon concentrates in installations with guided motion of the fluidized bed. *Koks i Khim.* No. 4, 14 (1964).
- B. I. MAIZEL and B. Ts. OKUN, Drying chambers heated by burning products of natural gas for drying of varnish-paint coatings. *Lakokr. Master. i ikh Prim.* No. 1 71 (1964).

- P. L. MOTEKAITIS, A dryer for dry-curing in the production of stiff skins. *Kozhev.-Obuvn. Prom.* No. 4, 35 (1964).
- A. NAUMENKO, Maize drying in corn-cobs with preliminary heating. *Mukomolno-Elevatorn. Prom.* No. 8, 6 (1964).
- YA. S. OPMAN, A pneumatic gaseous drying installation. *Torf. Prom.* No. 4, 19 (1964).
- L. L. PAVLOVSKY, Calculation methods for thermo-radiation drying plants for drying varnish-paint coatings. *Lakokrasochn. Mater. i ikh Prim.* No. 4, 78 (1964).
- I. YE. RUCHKIN, The investigation of the process of drying pellets in roasting. *Trudy In-ta Uralmekhanobr.* vyp. 11, 100 (1964).
- I. A. SEMCHENKO and V. D. MATSINA, On optimum operating conditions of drying raw materials (firing ceramic articles and cement clinker.) *Stroit. Mater.* No. 4, 25 (1964).
- V. P. SHATALOV, M. M. GOSTEV *et al.*, The investigation of the industrial conditions of drying of oil filled butadiene rubbers of low temperature polymerization. *Trudy Laborat. Khimii Vysokomolek. Soed. (Nauchn.-Issled. Fiz.-Khim. In-t Voronezhsk. Univ.-ta)*. vyp. 2, 126 (1963).
- V. D. SURKOV and E. I. KAUKHCHESHVILI, The conference on sublimation drying of food products. *Izv. Vyssh. Ucheb. Zav. Pishev. Tekhnol.* No. 1, 174 (1964).
- V. G. YAROTSKY, R. M. SAMELZON and A. I. NAUMENKO, On the possibility of obtaining common salt by the method of drying pulverized brine. *Sb. Nauchn. Trudov (Ukr. NII Solyan. Prom.)* vyp. 7, 94 (1964).
- G. ZELINSKY, L. KOMYSHNIK and V. DRATVA, An experiment of drying grain using gas-fired recirculative grain dryers. *Mukomolno-Elevatorn. Prom.* No. 7, 6 (1964).
- A. A. ZHERKO, Heat and mass transfer in drying of ceramic bodies in a heated fluid. *Inzh.-Fiz. Zh.* 7, No. 8, 27 (1964).

THERMAL PROPERTIES AND METHODS OF DETERMINING THEM; THERMAL MEASURING DEVICES

- A. K. ABAS-ZADE and A. A. GYLMANOV, On heat conductivity of oils and their mixtures. *Azerbaidzhansk. Neft. Khoz.* No. 1, 36 (1964).
- M. I. ALIEV and A. Yu. DZHANGIROV, Study of thermal and electrical properties of $\text{InSb}-2\text{n}_2\text{Te}_3$ alloys. *Fiz. Tyyerd. Tela* 6, vyp. 8, 2415 (1964).
- YE. T. ANTROPOV and A. A. SAPRONOV, Simple detecting elements for a shock tube. *Teplofiz. Vysok. Temper.* 2, No. 3, 482 (1964).
- A. V. BARANOV, V. G. KAREV and T. I. IVANOVA, Boiling points of aqueous solutions of magnesium nitrates, zinc nitrates and their mixtures. *Trudy (Sib. Tekhnol. In-t) Sb.* 36, 57 (1963).
- S. M. BELOTSERKOVSKY, V. S. SUKHOGRUKIKH and V. S. TATARENCHIK, Determination of the density field in three-dimensional gas flow using optical methods. *Zh. Prikl. Mekhan. i Tekhn. Fiz.* No. 3, 95 (1964).
- V. P. BIELOUSOV, V. YE. SABININ and I. V. DMITRIEV, A calorimeter for the determination of specific heats of evaporation of fluid mixtures. *Izv. Vyssh. Ucheb. Zav. Khim. i Khim. Tekhnol.* 7, No. 2, 335 (1964).
- L. I. BERGER and A. E. BALANEVSKAYA, Thermal expansion, heat conduction and the modulus of elasticity of a range of ternary semiconductor combinations of a type $\text{A}_2^{\text{IB}^{\text{IV}}} \text{C}_3^{\text{VI}}$. *Fiz. Tyyerd. Tela* 6, vyp. 5, 1311 (1964).
- V. S. BIL and N. D. AVTOKRATOVA, Temperature dependences of heat conductivity and thermal diffusivity of some unfilled polymers. *Teplofiz. Vysok. Temper.* 2, No. 2, 192 (1964).
- Yu. A. BORISOV, A. V. GUSAROV and L. N. GOROKHOV, The mass-spectrometric investigation of cesium peroxide evaporation. *Teplofiz. Vysok. Temper.* 2, No. 3, 487 (1964).
- I. B. BURTSEV and A. P. TELKOV, On hydraulic resistance of liquid motion in pipelines. *Izv. Vyssh. Ucheb. Zav. Neft. i Gaz* No. 5, 85 (1964).
- E. F. CHAIKOVSKY and G. M. PYATIGORSKY, On the definition of the heat of evaporation of the positive ions by the surface ionization of atoms of alkaline metals. *Zh. Tekhn. Fiz.* 34, vyp. 6, 1092 (1964).
- V. YA. CHEKHOVSKY, Thermodynamic properties of corundum-sample substance in calorimetry. *Teplofiz. Vysok. Temper.* 2, 296 (1964).
- S. I. DRAKIN, L. N. ERBANOVA and M. KH. KARAPETYANTS, Determination of instantaneous heat effects by means of the Mishenko and Sukhotin modification of the Schottky calorimeter. *Zh. Fiz. Khim.* 38, vyp. 4, 1051 (1964).
- G. N. DULNEV and Z. V. SIGALOVA, Thermal conductivity of granular systems. *Inzh.-Fiz. Zh.* 7, No. 10, 49 (1964).
- Yu. A. EPIKHIN, M. S. STAKHANOVA and M. KH. KARAPETYANTS, Changes in volume and heat capacities of aqueous salt solutions. III. *Zh. Fiz. Khim.* 38, vyp. 3, 692 (1964).
- S. I. FADEYEV, A problem of a piston in a uniformly deforming medium. *Inzh. Zh.* 4, vyp. 2, 325 (1964).
- L. P. FILIPPOV, The study of thermal properties of solid and liquid metals at elevated temperatures. *Vestn. Mosk. Univ. Ser. III. Fiz. i Astronom.* No. 4, 90 (1964).
- L. P. FILIPPOV and L. A. PIGALSKAYA, Metal thermal diffusivity measurement at high temperatures. I. *Teplofiz. Vysok. Temper.* 2, No. 3, 384 (1964).
- L. P. FILIPPOV and Yu. N. SIMONOV, Measurements of heat conductivity of metals at high temperatures. *Teplofiz. Vysok. Temper.* 2, No. 2, 188 (1964).
- L. P. FOKIN, Generalized tables of thermodynamic properties of dissociated ideal gases. *Teplofiz. Vysok. Temper.* 2, No. 3, 367 (1964).
- Yu. E. FRAIMAN, An absolute method of a complex determination of thermal properties of non-metallic materials. *Inzh.-Fiz. Zh.* 7, No. 10, 73 (1964).
- I. F. GOLUBEV and O. A. DOBROVOLSKY, The density measurement of nitrogen and hydrogen at low temperatures and high pressures by the method of hydrostatic weighing. *Gazov. Prom.* No. 5, 43 (1964).
- I. F. GOLUBEV and M. V. KALINA, Heat conductivity of nitrogen and hydrogen at temperatures from 20 to

- 195°C and pressures from 1 to 500 atm. *Gazov. Prom.* No. 8, 41 (1964).
- I. F. GOLUBEV and V. P. SOKOLOVA, Heat conductivity of ammonia at different temperatures and pressures. *Teploenergetika* No. 9, 64 (1964).
- V. V. GONCHAROV, A. F. KOLECHKOVA et al., The heat conductivity of industrial refractories. *Trudy In-ta (Vsesoyuzn. In-t Nauchn.-Issled. i Proektn. Rabot Ogneuporn. Prom.)* vyp. 35, 26 (1963).
- A. R. GORDON and G. F. MUCHNIK, Determination of an integral degree of metal blackness depending on a degree of surface roughness. *Teplofiz. Vysok. Temper.* 2, No. 2, 292 (1964).
- M. KH. KARAPET'YANTS and G. V. ZHUKOV, Application of the comparative calculation method for the calculation of the properties of compounds in corresponding states. I. *Zh. Fiz. Khim.* 38, vyp. 4, 1015 (1964).
- B. G. KEGLIN and B. I. KHRAPOV, Temperature measurement at a point of a surface in unsteady friction. *Zav. Laborat.* No. 8, 968 (1964).
- F. P. KESAMANLY, D. N. NASLEDOV and YU. V. RYD, The thermal e.m.f. and transverse Nernst-Ettingshausen effect in p-ZnSnAs₂ crystals. *Fiz. Tverd. Tela* 6, vyp. 7, 2187 (1964).
- F. G. KHATMULLIN and G. A. BABALYAN, On the influence of the active naphthalene components on a kinetics of drop adhesion of hydrocarbon liquids in a capillary. *Izv. Vyssh. Ucheb. Zav. Neft. i Gaz* No. 6, 63 (1964).
- O. A. KRAEV and A. A. STELMAKH, Thermal diffusivity of tantalum, molybdenum and niobium at temperatures above 1800°K. *Teplofiz. Vysok. Temper.* 2, No. 2, 302 (1964).
- YE. M. KRAVCHUK, The accuracy of thermal coefficients determined by the method of plane temperature waves. *Inzh.-Fiz. Zh.* 7, No. 8, 85 (1964).
- R. YE. KRZHIZHANOVSKY, Thermal properties of titanium and heat conduction of its alloys with tin and aluminium. *Teplofiz. Vysok. Temper.* 2, No. 3, 392 (1964).
- R. YE. KRZHIZHANOVSKY and N. P. SIDOROVA, Determination of thermal conductivity of liquid-metal heat agents by the longitudinal heat flux method. *Inzh.-Fiz. Zh.* 7, No. 8, 75 (1964).
- N. M. KUZNETSOV and B. A. BURAKOV, The investigation of critical thermal flows in boiling of diphenyl mixtures in a large volume. *Teploenergetika* No. 6, 55 (1964).
- A. YE. LUTSKY and V. N. SOLONKO, The hydrogen bond and the rate of ultrasonic propagation in liquids. *Zh. Fiz. Khim.* 38, No. 5, 1091 (1964).
- YE. A. MIROSHNICHENKO, V. P. LEIKO and YU. A. LEBEDEV, Semimicrocalorimeter. *Zh. Fiz. Khim.* 38, vyp. 4, 1054 (1964).
- V. S. OSKOTSKY, On the negative thermal expansion coefficient in germanium. *Fiz. Tverd. Tela* 6, vyp. 5, 1294 (1964).
- N. F. OTPUSHCHENNIKOV, The temperature coefficient of the sound velocity and thermal properties of liquid. *Izv. Vyssh. Ucheb. Zav. Fizika* No. 3, 108 (1964).
- R. G. PERELMAN, The choice of an intermediate cooling fluid for a liquid-metal circuit. *Teploenergetika* No. 6, 51 (1964).
- YE. S. PLATUNOV, Measurement of thermal capacity and heat conductivity of rods in operating conditions of monotonic heating-cooling. *Teplofiz. Vysok. Temper.* 2, No. 3, 378 (1964).
- V. P. PREOBRAZHENSKY, N. P. BUVIN et al., Temperature measurement in pulsating gaseous flow. *Energomashinosr.* No. 7, 38 (1964).
- P. P. PUGACHEVICH, Gravitation gas apparatus for surface tension measurements. *Zh. Fiz. Khim.* 38, No. 5, 1377 (1964).
- I. S. RADOVSKY, Investigation of sound velocity in liquid and gaseous argon. *Zh. Prikl. Mekhan. i Tekhn. Fiz.* No. 3, 172 (1964).
- L. A. SERAFIMOV, V. V. PROKHOROVA and R. I. NOVOSELOVA, Liquid-vapor phase equilibrium in the system acrylonitrile-propionitrile at atmospheric pressure. *Zh. Fiz. Khim.* 38, vyp. 6, 1662 (1964).
- S. S. SHALYT and P. V. TAMARIN, On the thermal conductivity and thermal e.m.f. of InSb at low temperatures. *Fiz. Tverd. Tela* 6, vyp. 8, 2327 (1964).
- M. A. STYRIKOVICH, E. P. SEROV et al., Mass- and heat-transfer characteristics investigated by a "salt" method. *Dokl. Akad. Nauk SSSR.* 157, No. 1, 91 (1964).
- The All-Union Conference on thermal properties of real gases. *Teplofiz. Vysok. Temper.* 2, No. 2, 304 (1964).
- N. I. TIKHONOV and YU. I. DANILOV, On the investigations of heat-resistivity under the conditions of variable heat flux. *Teplov. Napryazh. v Elem. Konstr.* vyp. 3, 220 (1963).
- YE. YE. TOTSKY, The experimental determination of a coefficient of linear expansion of metals and alloys. *Teplofiz. Vysok. Temper.* 2, No. 2, 205 (1964).
- A. M. TROKHAN, Measurement of the parameters of flowing gas with the aid of a high-velocity electron beam. *Zh. Prikl. Mekhan. i Tekhn. Fiz.* No. 3, 81 (1964).
- N. S. TSKHAI, A method of determination of the kinetic temperature of gas. *Teplofiz. Vysok. Temper.* 2, No. 2, 294 (1964).
- L. A. VASILIEV and I. V. ERSHOV, Plane shock wave intensity in a supersonic flow model as determined quantitatively by the differential shadow method. *Dokl. Akad. Nauk SSSR.* 157, No. 2, 317 (1964).
- A. B. VERZHINSKAYA and P. S. KUTS, The relation between thermal properties of heat-insulating peat slabs and the moisture content during a drying process. *Inzh.-Fiz. Zh.* 7, No. 8, 81 (1964).
- I. I. VISHNEVSKY and M. I. DZYUBENKO, Measurement of thermal conductivities and thermal diffusivities of refractory materials by the transient regime method. *Inzh.-Fiz. Zh.* 7, No. 10, 45 (1964).
- S. A. VOITKEVICH, Surface tension and vapour pressure of liquid organic compounds. *Zh. Fiz. Khim.* 38, vyp. 6, 1666 (1964).
- M. P. VUKALOVICH, V. V. ALTUNIN and A. N. GUREEV, The experimental investigation of thermal capacity of carbon dioxide at high pressures. *Teploenergetika* No. 9, 68 (1964).
- M. P. VUKALOVICH, D. S. RASSKAZOV et al., Thermal properties of monoizopropildiphenyl. *Teploenergetika* No. 6, 56 (1964).

- A. A. YAPRINTSEVA and A. V. FINKELSHTEIN, Heats of combustion and standard enthalpies of formation of some ketones of a furan range. *Trudy (Sib. Tekhnol. In-t) Sb.* 36, 75 (1963).
- I. I. ZASLAVSKY and V. V. BIRYUKOV, On designing and calculation of some systems of temperature control in periodical processes. *Khim. Prom.* No. 5, 56 (1964).
- HEAT AND MASS TRANSFER INVOLVING HIGH TEMPERATURES AND IN PLASMA**
- V. A. ABRAMOV and Yu. A. TARASOV, Cesium plasma radiation. *Teplofiz. Vysok. Temper.* 2, No. 2, 160 (1964).
- M. Ya. ALIEVSKY, V. M. ZHDANOV and V. A. POLYANSKY, The tensor of viscous stresses and thermal flow in a two-temperature partially ionized gas. *Zh. Prikl. Mekhan. i Tekhn. Fiz.* No. 3, 32 (1964).
- G. M. BAM-ZELIKOVICH, Solutions of some problems of one-dimensional transient motion of conductive gas under the action of strong electromagnetic fields. *Prikl. Matem. i Mekhan.* 28, vyp. 4, 664 (1964).
- G. M. BAM-ZELIKOVICH, Some variational problems of acceleration of conductive gas in a strong electromagnetic field. *Izv. Akad. Nauk SSSR. Mekhan. i Mashinostr.* No. 3, 9 (1964).
- V. B. BARANOV, On regions of applicability of different equations for the investigation of completely ionized gas. *Zh. Prikl. Mekhan. i Tekhn. Fiz.* No. 3, 52 (1964).
- M. V. BELUBEKYAN, Equations of the magnetohydrodynamic boundary layer. *Trudy Leningr. Politekhn. Instituta* No. 230, 107 (1964).
- Yu. A. BEREZIN and V. I. KARPMAN, On a theory of transient waves of finite amplitude in rarefied plasma. *Zh. Eksper. i Teor. Fiz.* 46, vyp. 5, 1880 (1964).
- G. S. BISNOVATY-KOGAN, Heat transfer and diffusion in partially ionized two-temperature plasma. *Zh. Prikl. Mekhan. i Tekhn. Fiz.* No. 3, 43 (1964).
- D. G. BYKHOVSKY and M. G. FRIDLYAND, The heat balance investigation of an extended spatially limited arc, burning in a two-component gaseous medium. *Teplofiz. Vysok. Temper.* 2, No. 3, 329 (1964).
- I. S. DANILKIN and V. N. TSYTOVICH, On the influence of weak steady turbulences on the motion of fast particles in plasma. *Zh. Tekhn. Fiz.* 34, vyp. 8, 1365 (1964).
- A. GAILITIS and V. N. TSYTOVICH, Radiation of cross electromagnetic waves with scattering of charged particles on plasma waves. *Zh. Eksper. i Teor. Fiz.* 46, vyp. 5, 1726 (1964).
- A. A. GALEEV, V. I. KARPMAN and R. Z. SAGDEEV, A solvable problem in theory of plasma turbulence. *Dokl. Akad. Nauk SSSR.* 157, No. 5, 1088 (1964).
- A. V. GUBAREV and V. I. KOVBASYUK, On the analysis of the Hall effect in moving plasma. *Teplofiz. Vysok. Temper.* 2, No. 2, 156 (1964).
- O. N. KROKHIN, Correlated regime of heating of plasma by means of radiation of an optical generator. *Zh. Tekhn. Fiz.* 34, vyp. 7, 1324 (1964).
- E. LEVI and M. SANDLER, A method of solution of transient one-dimensional problems of magneto-
- gasdynamics. *Teplofiz. Vysok. Temper.* 2, No. 3, 351 (1964).
- Yu. V. MAKAROV and Yu. A. POLYAKOV, The method of measuring thermal fluxes in plasma. *Teplofiz. Vysok. Temper.* 2, No. 2, 170 (1964).
- V. F. MININ, On an explosion on a liquid surface. *Zh. Prikl. Mekhan. i Tekhn. Fiz.* No. 3, 159 (1964).
- I. N. MURZINOV, On temperature profiles in bodies, moving at large heights with hypersonic velocities. *Izv. Akad. Nauk SSSR. Mekhan. i Mashinostr.* No. 4, 148 (1964).
- E. G. SAKHNOVSKY, One-liquid equations of the dynamics of a partially ionized gas in a strong magnetic field. *Prikl. Matem. i Mekhan.* 28, vyp. 3, 474 (1964).
- E. G. SAKHANOVSKY, Transitional plane-parallel flow of a partially ionized gas in a strong magnetic field. *Prikl. Matem. i Mekhan.* 28, vyp. 4, 760 (1964).
- N. V. SALTANOV and V. S. TKALICH, On a transient magneto-gasdynamic problem. Riemannian wave analogue. *Dokl. Akad. Nauk SSSR.* 156, No. 3, 529 (1964).
- V. L. SERGEYEV and F. B. YUREVICH, Characteristics of an electric arc heater with two cooled electrodes. *Inzh.-Fiz. Zh.* 7, No. 7, 62 (1964).
- M. I. SHLIOMIS, On vibrational convective instability of a conductive liquid in a magnetic field. *Prikl. Matem. i Mekhan.* 28, vyp. 4, 678 (1964).
- O. N. SUSLOV, Hypersonic viscous flow past a plate in the presence of a transverse magnetic field. *Inzh. Zh.* 4, vyp. 3, 545 (1964).
- A. TSINOBER, A. SHTERN and E. SHCHERBININ, On separation of hydromagnetic boundary layer. *Izv. Akad. Nauk Latv. SSR.* No. 12, 48 (1963).
- A. M. TSIRLIN, B. D. VORONIN and G. Ya. KHODOV, Hydraulic resistance of tubes with incorrectly shaped mouthpieces in high temperature gas flow. *Inzh.-Fiz. Zn.* 7, No. 8, 103 (1964).
- B. A. TVERSKOI, On a structure of shock waves in plasma. *Zh. Eksper. i Teor. Fiz.* 40, vyp. 5, 1653 (1964).
- Ye. N. VASILIEV, Yu. I. ORLOV and V. A. PERMYAKOV, Boundary conditions on the surface of plasma with sharply changing parameters. *Zh. Tekhn. Fiz.* 34, vyp. 8, 1341 (1964).
- V. P. ZAMURAEV, A laminar boundary layer in emitting-absorbing gas near a flat plate. *Zh. Prikl. Mekhan. i Tekhn. Fiz.* No. 3, 73 (1964).
- M. K. ZHEKAMUKHOV, Some steady motions in magnetic gasdynamic. *Vestn. Mosk. Univ. Ser. III. Fiz. i Astronom.* No. 3, 47 (1964).
- TRANSFER PROCESSES IN TECHNOLOGICAL INSTALLATIONS**
- N. I. ALEKSEEEVA and D. P. TIMOFEEV, Adsorption kinetics of a flow with variable gas concentration. *Zh. Prikl. Khim.* 37, vyp. 7, 1638 (1964).
- A. YA. ANDREEV and V. I. ORATOVSKY, The investigation of magnetite calcination in an apparatus with a fluidized bed. (The iron oxide production). *Trudy IREA (VNII Khim. Reaktivov i Psobo Chist. Khim. Veshchestv)* vyp. 25, 450 (1963).

- V. A. ANISTRATENKO and V. N. STABNIKOV, The hydraulics and mass transfer characteristics of scaly (jet) plates of mass-transfer columns. *Izv. Vyssh. Ucheb. Zaved. Pishchev. Tekhnol.* No. 1, 128 (1964).
- P. I. ANSON, On technical expediency of the application of fluid metal intermediate heat-transfer agents for high-temperature air heating. *Trudy Tallinsk. Politekhn. In-ta. Ser. A*, No. 205, 55 (1963).
- P. I. ANSON, Calculation of the temperature field in a Fild pipe with a non-boiling heat carrying fluid. *Trudy Tallinsk. Politekhn. In-ta. Ser. A*, No. 208. *Sudovye Silov. Ustanovki i Sudostr.*, Sb. 2, 21 (1963).
- A. V. ARSEEV and I. A. FEVRALEVA, Investigation of combustion and aerodynamics in chambers of sectional furnaces. *Sb. Nauch. Tr. (VNII Metallurg. Teplotekhniki)* No. 10, 178 (1963).
- A. YA. AVERBUKH, A. I. VITVITSKY *et al.*, A suspended layer in formalin production. *Izv. Vyssh. Ucheb. Zav. Khim. i Khim. Tekhnol.* 7, No. 2, 301 (1964).
- D. S. AZBEL, The hydrodynamics of processes in bubbling reactors. *Khim. Prom.* No. 7, 523 (1964).
- N. P. BABUSHKIN, V. S. MINKOVA *et al.*, Cleaning of the combustion gases from sulphurous compounds in a fluidized bed of embers at high temperatures. *Izv. Vyssh. Ucheb. Zav. Khim. i Khim. Tekhnol.* 7, No. 3, 445 (1964).
- YE. YA. BARSUKOV, The dynamics of gas streams in a fluidized bed. *Khim. i Teknol. Topliv i Masel* No. 8, 13 (1964).
- Yu. P. BASS and L. P. GILYAZETDINOV, Calculation of the length of a soot generator. *Inzh.-Fiz. Zh.* 7, No. 8, 114 (1964).
- N. P. BELIK, N. M. BELYAEV and G. S. SHANDOROV, Calculation of evacuation of gases from a volume. *Inzh.-Fiz. Zh.* 7, No. 9, 25 (1964).
- I. A. BELOKON and I. S. GULYI, On the interdependence of heat and mass transfer in cooling in crystallizers. *Trudy Kievsk. Tekhnol. In-ta Pishchev. Prom.* vyp. 27, 90 (1963).
- N. I. BELOKON, B. P. PORSHAKOV and B. S. TOLYBEKOV, The investigation of operation of the gas-turbine plant GT-700-4 and its regenerator under operating conditions. *Gazov. Prom.* No. 6, 29 (1964).
- YE. P. BLOKHIN, G. G. TRAYANOV *et al.*, A study of a heating well with an upper burner, using natural gas. *Sb. Nauchn. Trudov (VNII Metallurg. Teplotekhn.)* No. 10, 231 (1964).
- S. A. BOGATYKH, An investigation of adsorption processes of water vapour from gases in a foam cyclone apparatus. *Khim. Mashinostr.* No. 2, 17 (1964).
- A. I. BORISENKO and A. I. YAKOVLEV, The methods of thermal calculation of protected high-speed direct current electric motors. *Izv. Vyssh. Ucheb. Zav. Elektromekhan.* No. 5, 554 (1964).
- YE. S. BOROVIK, B. P. BATRAKOV and P. M. KOBZEV, The helium heater with fluid convective heat-exchangers. *Pribory i Tekhn. Eksper.* No. 4, 197 (1964).
- YE. S. BOROVIK, I. F. MIKHAILOV and N. A. KOSIK, Fluid friction and heat transfer in counterflow coil heat exchangers. *Inzh.-Fiz. Zh.* 7, No. 7, 3 (1964).
- YE. S. BOROVIK, I. F. MIKHAILOV and N. A. KOSIK, Heat exchanger calculation of liquefying installations. *Izv. Vyssh. Ucheb. Zav. Energetika* No. 5, 118 (1964).
- A. R. BRUN-TSEKHOVOI, YA. R. KATSOBASHVILI and A. N. EVREINOV, Some laws for particle separation in a fluidized bed. *Khim. i Tekhnol. Topliv i Masel* No. 8, 9 (1964).
- I. K. CHERNYSHEVSKY, The efficiency of heat-transfer installations *Energomashinostr.* No. 8, 24 (1964).
- I. A. DANILYCHEV, A. N. PLANOVSKY and O. S. CHEKHOV, Investigations of mixing on perforated plates and the methods of calculation of disk mass-transfer installations. *Khim. Prom.* No. 6, 61 (1964).
- V. V. DILMAN and E. V. SENKINA, The experimental determination of the longitudinal coefficient of mixing in liquid phase on grid trays. *Khim. i Tekhn. Topliv i Masel* No. 8, 46 (1964).
- V. D. DODNIKOV, An improvement of the equation for the calculation of the temperature estimated difference for banks of tubes in the presence of convection and gas radiation. *Trudy (Kuibyshev. Aviats. In-t) vyp.* 15, p. 2, 177 (1963).
- O. M. DROBYSHEVA and V. K. RASKIDKIN, Heat transfer through coil walls under the conditions of a bubbling-foam regime. *Trudy IPEA (VNII Khim. Reaktivov i Osobo Chist. Khim. Veshchestv)* vyp. 25, 446 (1963).
- N. K. ELUKHIN and O. I. STAROVITSKY, Heat transfer and hydraulic resistance in disk packings of regenerators. *Trudy VNIIKIMash. VNII Kisloridn. Msshinostr.* vyp. 7, 73 (1963).
- I. P. EPIK, A. A. OTS and V. I. REZNIK, On the methods of investigation of heat transfer for heating surfaces of boiler units using a-calorimeters. *Trudy Tallinsk. Politekhn. In-ta. Ser. A*, No. 209. 3 (1963).
- I. A. FEVRALEVA and A. V. ARSEEV, Some investigations of metal heating of a symmetric profile in a chamber of a sectional furnace. *Sb. Nauchn. Trudov (VNII Metallurg. Teplotekhniki)* No. 10, 188 (1963).
- A. V. GAVRILIN, On the evaporation theory in a thin layer at small thermal loads. *Trudy In-ta (Vsesoyuzn. Nauchn. Issled. i Eksper. Konstr. In-t Prodovolstv. Mashinostr.)* vyp. 4, 3 (1963).
- N. I. GELPERIN, V. G. AINSHTEIN and I. D. GOIKHMAN, On the range of existence of a fluidized bed. *Inzh.-Fiz. Zh.* 7, No. 7, 15 (1964).
- L. G. GOLOVKOV, Droplet size distribution in liquid pulverization by centrifugal pulverizers. *Inzh.-Fiz. Zh.* 7, No. 11, 55 (1964).
- S. A. GOLUBTSOV, T. A. TSVANGER *et al.*, The influence of the given conditions on the synthesis of phenoltrichlorosilane from silicon, chlorobenzene and chlorous hydrogen in a fluidized bed. *Zh. Prikl. Khim.* 37, vyp. 7, 1634 (1964).
- G. K. GONCHARENKO and V. A. ZHUKOV, Heat transfer from a wall to a flow of liquid bubbling on a disk plate. *Izv. Vyssh. Ucheb. Zav. Khim. i Khim. Tekhnol.* 7, No. 2, 320 (1964).
- G. M. GORELOV, V. N. ORLOV *et al.*, On the calculation of thermal characteristics of heat-transfer installations. *Trudy Kuibyshev. Aviats. In-ta* vyp. 15, p. 2, 127 (1963).
- B. M. GRAKHOVSKY and V. D. SEMENENKO, The density of

- particle distribution in a fluidized bed as a function of time. *Inzh.-Fiz. Zh.* 7, No. 7, 20 (1964).
- A. S. IPPOLITOV, On heat-transfer calculation in furnaces *Teploenergetika* No. 9, 54 (1964).
- A. S. ISSELRIN, An investigation of the operation of gas-burner arrangements using fire models. In: *Teoriya i Praktika Szhigan. Gaza* 2, L., 269 (1964).
- A. M. KAGAN and I. I. GELPERIN, Heat-transfer process stabilization in pipes. *Zh. Vsesoyuzn. Khim. Obshch-va im. Mendeleva* 9, No. 2, 233 (1964).
- M. KH. KISHINEVSKY and T. B. DENISOVA, The kinetics of mass transfer from a rotating disk in a laminar regime of motion. *Zh. Prikl. Khim.* 37, vyp. 7, 1544 (1964).
- V. I. KISLYKH, Distribution of the solid phase along the height of a fluidized bed. *Inzh.-Fiz. Zh.* 7, No. 10, 94 (1964).
- M. K. KLEINER and N. YU. TAITS, Determination of the optimum heat flux and temperature conditions in a furnace for high-rate heating of thin bodies. *Inzh.-Fiz. Zh.* 7, No. 10, 67 (1964).
- N. B. KONDUKOV, A. N. KORNILOV *et al.*, Study of the parameters of particle motion in a fluidized bed by an isotropic method. II. Kinematics of particles. *Inzh.-Fiz. Zh.* 7, No. 7, 25 (1964).
- G. S. KONNIKOV, The aim and methods for experimental investigation of gas exchange of a two-stroke engine by a method of a tracing gas. *Trudy Dalnevost. Tekhn. In-ta Rybn. Prom. i Khoz.* vyp. 4, 101 (1963).
- YE. N. KONSTANTINOV and A. M. NIKOLAEV, Investigations of mass transfer in rectification of quadricomponent mixtures. *Izv. Vyssh. Ucheb. Zav. Khim. i Khim. Tekhnol.* 7, No. 3, 492 (1964).
- L. A. KOZDOBA, Some investigation results of temperature fields in a gas-turbine rotor. *Izv. Vyssh. Ucheb. Zav. Energetika* No. 5, 59 (1964).
- N. A. KOZULIN and A. F. KULYAMIN, A mixing process of powdered materials in a fluidized bed. *Izv. Vyssh. Ucheb. Zav. Khim. i Khim. Teknol.* 7, No. 2, 313 (1964).
- N. G. KUZMIN and V. A. MALUSOV, Investigation of a process of high-rate film rectification. The principal regularities of mass transfer for rectification in single pipes. *Khim. Prom.* No. 5, 31 (1964).
- A. L. KUZNETSOV and A. V. SUDAREV, The aerodynamics and heat transfer of a flat turbulent jet, spreading along a flat surface (in gas-turbine plants). *Trudy Leningr. Karablestr. In-ta* vyp. 42, 121 (1964).
- A. L. KUZNETSOV and A. V. SUDAREV, Aerodynamics and heat transfer of a flat turbulent jet, spreading along a flat surface. *Energomashin.* No. 6, 8 (1964).
- L. S. KUZYAEV and YU. I. PROTASOV, Measurement of the rock surface temperature in thermal boring. *Inzh.-Fiz. Zh.* 7, No. 9, 10 (1964).
- G. A. MOKEEV, Heat transfer investigation in a diesel engine with application of an electrical simulation method. *Trudy Dalnevost. Politekhn. In-ta* 62, 55 (1964).
- V. N. NAUMOV and L. I. PYATOV, On an approximate method for the calculation of frequency characteristics of heat exchangers. *Nauchn. Trudy Mosk. Teknol. In-ta Legkoi Prom.* vyp. 28, 283 (1963).
- YU. S. OSHEROV, The analytical determination of a temperature field in a gas turbine cover. *Izv. Vyssh. Ucheb. Zav. Energetika* No. 5, 114 (1964).
- A. A. OTS and V. I. REZNIK, The investigation of heat transfer for shields of a boiler unit in cross-flow with steam injection. *Trudy Tallinsk. Politekhn. In-ta. Ser. A*, No. 209, 13 (1963).
- A. A. OTS and V. I. REZNIK, The investigation of heat transfer for shields of a gas-fired boiler in cross-flow and with vibration cleaning. *Trudy Tallinsk. Politekhn. In-ta. Ser. A*, No. 209, 33 (1963).
- A. PAVEL, The optimum height of a layer for stepped-counterflow heat exchangers with a fluidized bed. *Khim. i Tekhnol. Topliv i Masel* No. 6, 40 (1964).
- YU. S. POSTOLNIK and M. A. TYLKIN, Analytical and experimental determination of operating temperature conditions of blades in hot cutting. *Inzh.-Fiz. Zh.* 7, No. 9, 14 (1964).
- M. YE. POZIN, E. YA. TARAT and I. I. OREKHOV, Mass-transfer efficiency as a function of the hydrodynamic, physical-chemical and design parameters. *Zh. Prikl. Khim.* 37, vyp. 6, 1292 (1964).
- V. P. PROTSENKO, On the book *Thermodynamic Cycles of Atomic Energy Plants* by D. D. KALAFATI. *Teploenergetika* No. 6, 95 (1954).
- V. M. RAMM and YU. V. AKSELRUD, On heat-transfer intensity through a pipe wall with perforated and tubular disk plates. *Khim. Prom.* No. 5, 47 (1964).
- G. K. RUBTSOV and N. I. SYROMYATNIKOV, The fluidized bed as an intermediate heat-transfer agent in metal heating. *Izv. Vyssh. Ucheb. Zaved. Chern. Metallurg.* No. 3, 212 (1964).
- YU. A. SAMOLOVICH and YE. P. BLOKHIN, An engineering calculation of heating ingots and blanks in flame furnaces. *Sb. Nauchn. Trudov (VNII Metallurg. Teplotekhniki)* No. 10, 51 (1964).
- I. V. SAVIN, A. I. TIKHONOV and V. I. SMIRNOV, Investigation of the kinetics of sulphide oxidation in a fluidized bed. *Izv. Vyssh. Ucheb. Zav. Tsvetn. Metallurg.* No. 1, 57 (1964).
- N. YA. SAVVINA, Determination of heat-transfer coefficients (in manufacture of preserves). *Izv. Vyssh. Ucheb. Zav. Pishchev. Teknol.* No. 1, 153 (1964).
- G. A. SHCHAPOV, The local heat-transfer investigation in a narrow furnace with a flat flame. *Khim. i Tekhnol. Topliv i Masel.* No. 8, 42 (1964).
- L. N. SIDELKOVSKY, V. N. SHCHEVELEV and A. I. KUKHANOVICH, A study of the laws of surface erosion in a fluidized bed. *Izv. Vyssh. Ucheb. Zaved. Energetika* No. 7, 48 (1964).
- E. N. SULEIMENOV, YE. I. MACHKASOV and V. D. PONOMAREV, Chloration in a fluidized bed of high-titanium slags with a varying calcium oxide content. *Trudy In-ta Metallurg. i Obogashchen. Akad. Nauk Kaz. SSR.* 9, 32 (1964).
- A. M. SYCHEVA and N. N. EGOROV, Heat transfer from a fluid flowing through pipes with large packing. *Khim. i Tekhnol. Topliv i Masel.* No. 6, 14 (1964).
- YE. I. TAUBMAN, The simulation of transient conditions of an installation for multistage evaporation with the help of an electronic computer. *Izv. Vyssh. Ucheb. Zav. Energetika* No. 5, 73 (1964).

The results of a discussion on a reasonable area for district heating under modern conditions of the development of power supply. *Teploenergetika* No. 6, 88 (1964).
YU. A. VASANOV and YU. G. ZHULEV, The optimum shape of triangular cooling ribs taking into consideration the interradiation between the ribs and to a cooled surface. *Izv. Akad. Nauk SSSR. Energetika i Transport* No. 3, 391 (1964).
V. P. VESELOV and A. V. TEMNIKOV, Electromodelling of

heat transfer in regenerative heat exchangers. *Trudy Kuibysh. Aviats. In-ta vyp.* 15, p. 2, 287 (1963).
YE. I. YELITENKO, The basis of the hydrodynamics of the processes during the operation of the impeller in a floating machine. *Nauchn. Trudy (Nauchn. Issled. i Proektin. In-t Redkometallich. Prom.)* 10, 79 (1963).
N. K. ZAITSEVA, Analytical dependences for the calculation of steam-heated domestic radiators. *Izv. Vyssh. Ucheb. Zav. Energetika* No. 6, 82 (1964).