

HEAT AND MASS TRANSFER BIBLIOGRAPHY— SOVIET WORKS

A. V. LUIKOV

Heat and Mass Transfer Institute of the B.S.S.R. Academy of Sciences, 25 Podlesnaya, Minsk, B.S.S.R., U.S.S.R.

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BOOKS

- Analytical Solution Methods of Heat and Mass Transfer Problems*. Naukova Dumka, Kiev (1967).
- A. I. ANDRYUSHCHENKO, *Fundamentals of Engineering Thermodynamics of Real Processes*. Vysshaya Shkola, Moscow (1967).
- A. D. DMITROVICH, *Heat and Mass Transfer in Concrete Hardening in a Vapour Medium*. Stroizdat, Moscow (1967).
- O. N. FAVORSKII and YA. S. KADANER, *Heat Transfer Problems in Space*. Vysshaya Shkola, Moscow (1967).
- V. A. FILIPPOV (editor), *Aerodynamics, Heat and Mass Transfer in Dispersed Flows (With Reference to Processes of Coal Drying in Suspension)*. Collected Papers. Nauka, Moscow (1967).
- A. V. LUIKOV, *Heat Conduction Theory*. Vysshaya Shkola, Moscow (1967).
- YU. A. MIKHAILOV, *Drying by Superheated Steam*. Energiya, Moscow (1967).
- A. S. MONIN and A. M. YAGLOM, *Statistical Hydromechanics. Turbulent Mechanics. Part 2*. Nauka, Moscow (1967).
- V. I. TOLUBINSKII (editor), *Heat and Mass Transfer in Chemical Engineering*. Collected Papers. Naukova Dumka, Kiev (1967).
- YU. D. TRET'YAKOV, *Thermodynamics of Ferrites*. Khimiya, Leningrad (1967).
- N. A. YARYSHEV, *Theoretical Fundamentals of Measurement of Unsteady-state Temperatures*. Energiya, Leningrad (1967).

GENERAL

- V. B. BALAKIN, Disappearance of a layer of variable mass at gradual energy generation, *Inzh.-Fiz. Zh.* **14**, 1065 (1968).
- YU. K. BRATUKHIN and L. N. MAURIN, Dissolution of a heated body in contact with a free fluid surface, *Inzh.-Fiz. Zh.* **14**, 1033 (1968).
- I. A. CHEREPENNIKOV and V. B. KOROBV, Application of the similarity theory to definition of fluid viscosity from molecular data, *Inzh.-Fiz. Zh.* **15**, 139 (1968).
- A. M. FAIZIL'BER and N. A. FRIDLENDER, Electric modelling of energy and mass transfer problems, *Inzh.-Fiz. Zh.* **15**, 28 (1968).

- L. N. POLYANIN, A temperature field of two-dimensional axisymmetric regions, *Inzh.-Fiz. Zh.* **14**, 1056 (1968).
- T. F. RODIONOVA, V. G. RYKOV and I. M. TOLMACH, On application of the electric modelling method to the calculation of cooling of burdened magnetic conduits, *Inzh.-Fiz. Zh.* **14**, 1010 (1968).
- V. V. SHIRSHOVA, Coefficients, characterizing susceptibility of the posistor resistance to the change in heat-transfer conditions, *Inzh.-Fiz. Zh.* **14**, 1025 (1968).
- E. G. VORONTSOV, Minimum wetting rate in vertical film equipment, *Inzh.-Fiz. Zh.* **14**, 1075 (1968).

THERMODYNAMICS

- A. A. ANTANOVICH, G. YA. SAVEL'EV and M. A. PLOTNIKOV, Calculation methods of gas thermodynamic properties at pressures up to 12 kbar and temperatures above 700°K, *Inzh.-Fiz. Zh.* **15**, 335 (1968).
- A. A. ANTONOV and P. G. MASLOV, Thermodynamic properties of a number of gaseous compounds as a function of temperature, *Zh. Prikl. Khim.* **40**, 2787 (1967).
- R. I. ARTYM, On the theory of statistical equilibrium of a mixture of particles, III, *Teplofiz. Vysok. Temp.* **5**, 977 (1967).
- YA. I. GERASIMOV, Thermodynamic properties of solid and liquid metal alloys and their connection with phase diagrams, *Zh. Fiz. Khim.* **41** (10)
- M. KH. KARAPET'YANTS, S. I. DRAKIN and R. V. SANTUKHOVA, Apparent heat capacities of univalent ions in methanol, *Zh. Fiz. Khim.* **41**, 2653 (1967).
- P. M. KESSEL'MAN and V. R. KAMENETSKII, A generalized equation for the calculation of viscosity of inert gases at high pressures, *Inzh.-Fiz. Zh.* **15**, 514 (1968).
- V. A. KIRILLIN, A. E. SHEINDLIN, V. YA. CHEKHOVSKOI and I. A. ZHUKOVA, Enthalpy and thermal capacity of chrome at high temperatures, *Teplofiz. Vysok. Temp.* **5**, 1124 (1967).
- A. V. KISELEV and D. P. POSHKUS, Molecular-statistical study of dependence between thermodynamic characteristics of different adsorption systems, *Zh. Fiz. Khim.* **41**, 2647 (1967).
- I. R. KRICHEVSKII, Thermodynamics of critical phenomena

- in binary infinitely diluted solutions, *Zh. Fiz. Khim.* **41**, 2458 (1967).
- V. K. PUTKOVA and I. N. GODNEV, Calculation of thermodynamic functions of H_2O_2 and similar molecules, *Zh. Fiz. Khim.* **41**, 2689 (1967).
- E. S. SADYKH-ZADE, D. KH. ISMAILOV, V. K. KARAKASHEV and A. A. ABDULLAEV, On effect of moisture content on thermodynamic non-equilibrium of a process in gas-condensed systems, *Izv. Vyssh. Ucheb. Zaved., Neft i Gaz* No. 10, 37 (1967).
- M. SMOLUKHOVSKII, Limits of validity of the second law of thermodynamics, *Uspekhi Fiz. Nauk* **93**, 724 (1967).
- E. P. SOKOLOVA and A. G. MORACHEVSKII, Phase equilibria and thermodynamic properties of methylethylketone-water and cyclohexanone-water systems, *Vest. Leningr. Un-ta* **22**, Fizika, Khimiya, vyp. 4, 98 (1967).
- V. V. SYCHEV, Behaviour of thermodynamic quantities on boundary curves, *Teplofiz. Vysok. Temp.* **5**, 1129 (1967).
- M. A. URUSOVA, On vapour pressure of saturated aqueous solutions of alkali-halogen salts, *Zh. Neorgan. Khim.* **12**, 3395 (1967).
- B. F. YUDIN, On thermodynamic analysis of solid-phase reactions, *Chemistry of High-temperature Materials*, L. p. 307 (1967).
- V. V. ZHURIN and O. K. KOSTKO, Calculation of thermodynamic parameters of gas behind a strong shock wave in argon, *Teplofiz. Vysok. Temp.* **5**, 1109 (1967).
- ### HEAT CONDUCTION
- A. K. ABAS-ZADE, S. K. AKHUNDOV and A. A. GYLMANOV, Calculation of heat conduction of liquids by the theory of corresponding states, *Ukr. Fiz. Zh.* **12**, 1211 (1967).
- YU. N. ANDREEV, On an approximate solution of the problem of steel heating with minimum decarbonization, *Inzh.-Fiz. Zh.* **15**, 280 (1968).
- N. V. ANTONISHIN, L. E. SIMCHENKO and V. V. LUSHCHIKOV, Unsteady-state thermal conductivity of a cylindrical bed of disperse material, *Problems of Intensification of Heat and Mass Transfer in Drying and Thermal Processes*, Minsk (1967).
- A. I. BORISYUK and I. A. MOTOVILOVETS, On a temperature field of a film of variable thickness, *Prikl. Mekh. (Akad. Nauk USSR)* **3**(12), 84 (1967).
- A. V. BULYGA and V. V. KHARITONOV, On temperature determination in two-dimensional heat conduction problems, *Inzh.-Fiz. Zh.* **15**, 146 (1968).
- A. I. CHERNOGOLOV and V. I. SHILOV, On heat transfer between metals and rollers in the deformation area, *Trudy In-ta Metallurgii (Ural'sk. Filial Akad. Nauk SSSR)* vyp. 13, 136 (1966).
- V. V. DANENBERG and V. I. PLYUTINSKII, The approximate solution method of a two-dimensional problem of transient heat transfer, *Trudy (Vsesoyuzn. TsNII Kompleksn. Avtomatiz.)* vyp. 16, 229 (1967).
- F. N. DRESVYANNIKOV, Study of thermal conductivity of the system $N_2O_4 \rightleftharpoons 2NO_2 \rightleftharpoons 2NO + O_2$, *Inzh.-Fiz. Zh.* **14**, 1086 (1968).
- I. T. EFIMOVA, Some problems of the heat conduction theory for a two-layer medium, *Inzh.-Fiz. Zh.* **15**, 129 (1968).
- B. N. FRADLIN and F. A. TSYKUNOV, Development of integral-differential equations in the theory of plates and films, *Prikl. Mekh. (Akad. Nauk USSR)* **3**(12), 10 (1967).
- YU. A. GANIEV and YU. L. RASTORGUEV, Thermal conductivity of organic liquids, *Inzh.-Fiz. Zh.* **15**, 519 (1968).
- V. I. GUBINSKII, Electric simulation of metal heating with the formation of scale, *Inzh.-Fiz. Zh.* **15**, 488 (1968).
- T. GUDMEN, Application of integral methods in nonlinear problems of unsteady heat transfer, *Heat Transfer Problems*, M. (1967).
- I. A. GUSEV and A. F. CHUDNOVSKII, Thermal conductivity of semiconductors irradiated with fast neutrons of low temperature range, *Inzh.-Fiz. Zh.* **14**, 1101 (1968).
- M. M. IVASHCHENKO and V. M. LYAPUNOV, On simultaneous solution of temperature problems in a rotor and a stator of a gas turbine, *Inzh.-Fiz. Zh.* **15**, 12 (1968).
- M. G. KAGANER, Solution of the problem on monotonic heating of a plate by various methods, *Inzh.-Fiz. Zh.* **15**, 505 (1968).
- V. A. KALASHNIKOV, YA. F. RUTNER and B. F. TRAKHTENBERG, Unsteady contact heat conduction problem in combined cylindrical systems with thermal resistance, *Inzh.-Fiz. Zh.* **15**, 31 (1968).
- G. A. KIL'CHINSKAYA, Propagation of thermoelastic waves in a heat conducting layer of constant thickness, *Prikl. Mekh. (Akad. Nauk USSR)* **3**(12), 78 (1968).
- L. A. KOZDOBA and V. I. MAKHNENKO, On calculation of "critical thickness" of plates with local surface heating, *Inzh.-Fiz. Zh.* **15**, 103 (1968).
- S. N. KRUSHKOV, On some problems with an unknown boundary for a heat conduction equation, *Prikl. Mat. Mekh.* **31**, 1009 (1967).
- Y. A. LEVIN and M. S. SHUN, On the influence of periodic heating of a medium on a solid body, *Izv. Akad. Nauk SSSR, Energ. Transport* No. 6, 142 (1967).
- A. S. LYALIKOV and L. S. KONOVALOVA, The temperature field of a short tube with internal heat sources, *Inzh.-Fiz. Zh.* **15**, 494 (1968).
- V. I. MAKHNENKO, L. A. PETUN and V. M. SHEKERA, Calculation of temperature cycles in welding of a thin plate with a solid body by a quick-moving source, *Fiz. Khim. Obrabotki Mater.* No. 4, 81 (1967).
- V. P. MERZLYAKOV, On a heat conduction problem for a hollow cylinder, *Teplofiz. Vysok. Temp.* **5**, 1058 (1967).
- YA. M. NAZIEV, An unsteady-state temperature field in an infinite hollow cylinder with a variable heat flux, *Izv. Akad. Nauk SSSR, Energ. Transport* No. 6, 135 (1967).
- V. S. NESHPOR, Thermal conductivity of silicides of metals, *Inzh.-Fiz. Zh.* **15**, 321 (1968).
- V. G. PETRENKO, On thermal conductivity of a heterogenous plate, *Prikl. Mekh. (Akad. Nauk USSR)* **3**(11), 54 (1967).
- V. G. POLISHCHUK, Heat transfer on an internal surface in centrifugal casting of tubes, *Liteinoe Proizvodstvo* No. 6, 26 (1967).
- A. R. RABINOVICH, Initial heat transfer of metal and mould, *Liteinoe Proizvodstvo* No. 6, 23 (1967).
- L. S. SLOBODKIN and B. A. LARIONOV, On calculation of contact mass transfer in a thermoplastic system, *Problems*

- of *Intensification of Heat and Mass Transfer in Drying and Thermal Processes*, Minsk, 149 (1967).
- O. N. SUETIN, O. T. IL'CHENKO, and V. E. PROKOFIEV, Solution of transient heat conduction problems with time variable boundary conditions of the third kind on electric models, *Inzh.-Fiz. Zh.* **14**, 1038 (1968).
- P. V. TSOI, On an approximate solution method of unsteady-state heat conduction problems, *Teplofiz. Vysok. Temp.* **5**, 1048 (1967).
- A. K. TSOKUR, Study of temperature distribution inside a moving band heat source, *Inzh.-Fiz. Zh.* **15**, 534 (1968).
- R. A. TURUSOV and M. M. STRATONOVA, Thermal stresses in polymeric rods in nonhomogeneous heating, *Mekh. Polimerov (Akad. Nauk Latv. SSR)* No. 5, 944 (1967).
- YU. V. VIDIN, Study of the heating of a rectangular bar at variable temperature of the emitting medium, *Izv. Akad. Nauk SSSR, Energ. Transport* No. 6, 121 (1967).
- YU. V. VIDIN, Transient heat conduction in a laminated medium, *Inzh.-Fiz. Zh.* **14**, 1048 (1968).
- V. M. VIGAK and S. V. FAL'KOVSKII, Study of temperature fields and stresses in a tube at forced oscillations of temperature, *Teploenergetika* No. 1, 37 (1968).
- I. I. VISHNEVSKII and V. N. SKRIPAK, Thermal conductivity of solid solutions of refractory oxides, *Chemistry of High-temperature Materials*, L. (1967).
- I. I. VISHNEVSKII and V. N. SKRIPAK, Thermal conductivity of semicrystalline corundum within the range of 90–1100°K, *Inzh.-Fiz. Zh.* **15**, 329 (1968).
- A. V. VOLODARSKII, I. G. TOFAN and A. A. MIKHELEV, Study of heat transfer in an initial stage of a baking process (of bread products), *Khlebopekarn. i Konditersk. Prom.* No. 9, 15 (1967).
- V. A. ZEIGARNIK, V. E. PELETSKII and A. S. TARABANOV, Thermal conductivity of porous graphitized materials in the temperature range from 400 to 1400°C, *Khim. Tverd. Tela* No. 3, 116 (1967).
- ### CONVECTIVE HEAT TRANSFER
- I. N. ADAMENKO and M. I. KAGANOV, Heat transfer between a solid and helium filling a narrow gap, *Zh. Eksper. Teoret. Fiz.* **53**, 886 (1967).
- V. M. BUZNIK, V. A. ALEKSANDROV and G. F. SMIRNOV, On the effect of surface tension forces on the heat transfer coefficient in vapour condensation on an inclined tube, *Heat Transfer and Hydrodynamics in Two-phase Media*, Kiev (1967).
- A. V. FURMAN and G. I. FUKS, The analytic calculation of simultaneous heating of bodies by radiation and convection, *Izv. Vyssh. Ucheb. Zaved., Chern. Metallurg.* No. 6, 139 (1967).
- M. A. GEISHTOVT and R. A. BEREZHINSKII, Empirical dependences for the calculation of heat transfer through a finned wall, *Teploenergetika* No. 1, 73 (1968).
- V. V. GUTAREV, V. A. KIRPIKOV and I. S. OGANESYAN, Study of heat transfer and hydraulic resistance of a surface with longitudinal wavy ribs, *Khim. i Neft Mashinostr.* No. 12, 27 (1967).
- N. L. KAFENGAUZ and M. I. FEDOROV, Study of high-frequency pressure oscillations arising in heat transfer to water, *Teploenergetika* No. 1, 47 (1968).
- L. G. KALININ and Z. R. GORBIS, Study of heat transfer by the schlieren method for a rotating sphere under conditions of natural convection, *Inzh.-Fiz. Zh.* **15**, 481 (1968).
- A. M. KICHIGIN and L. A. KESOVA, Interrelation between the character of sonic vibrations and the mode of surface boiling of water in annular ducts, *Zh. Prikl. Mekh. Tekhn. Fiz.* No. 6, 79 (1967).
- T. A. KOLACH, A. B. KRASNOSHTANOV and V. P. MAGAKIN, Determination of the rate of random liquid convection, *Dokl. Nauchn. Tekhn. Konfer. MEI (Mosk. Energetich. In-t) M* (1967).
- V. T. KUMSKOV and YU. P. SIDOROV, Combined heat transfer under the conditions of free convection, *Inzh.-Fiz. Zh.* **15**, 400 (1968).
- M. N. MAKSUMOV, On absolute and convective instability in gravitational systems, *Astronom. Zh.* **44**, 798 (1967).
- P. A. NOVIKOV, Study of convective heat and mass transfer in sublimation of a rotating sphere in rarefied air, *Inzh.-Fiz. Zh.* **15**, 248 (1968).
- G. V. NOZDRENKO, Approximate estimation of heat transfer Freons of supercritical parameters, *Inzh.-Fiz. Zh.* **14**, 1091 (1968).
- A. P. ORNATSKII, L. F. GLUSHCHENKO and A. M. KICHIGIN, Critical conditions of heat transfer in annuli with heat supply from both sides, *Heat Transfer and Hydrodynamics in Two-phase Media*, Kiev (1967).
- A. P. ORNATSKII, A. M. KICHIGIN and L. A. KESOVA, Critical condition of heat transfer in transverse flow past a cylindrical surface, *Heat Transfer and Hydrodynamics in Two-phase Media*, Kiev (1967).
- R. A. PAVLOVSKII, Approximate solution of a steady-state problem under the conditions of convective heat transfer, *Inzh.-Fiz. Zh.* **15**, 207 (1968).
- B. A. PERMYAKOV, V. I. BABII and A. G. SEREBRYAKOVA, Study of heat transfer from a tube wall to a dust-air mixture in flow, *Teploenergetika* No. 1, 33 (1968).
- V. D. POPOV and D. E. SINAT-RADCHENKO, Heat transfer from vibrating coils to water and sugar solutions, *Heat Transfer and Hydrodynamics in Two-phase Media*, Kiev (1967).
- S. M. REPRINTSEVA and N. V. FEDOROVICH, On a solution of a problem of complex heat transfer for moving disperse media, *Problems of Heat and Mass Transfer Intensification in Drying and Thermal Processes*, Minsk (1967).
- M. ROMIG, Effect of electric and magnetic fields on heat transfer of electroconducting media, *Heat Transfer Problems*, M. (1967).
- K. N. SEMENOV, F. P. GROSU and M. K. BALOGA, Effect of a corona discharge on convective heat transfer in air, *Elektronnaya Obrabotka Materialov* No. 4 (16), 38 (1967).
- R. SESS, Combined action of thermal radiation with thermal conductivity and convection, *Heat Transfer Problems*, M. (1967).
- A. A. TSARS and V. YA. GRUSLIS, Heat transfer from a vibrating cylinder in an annulus, *Izv. Akad. Nauk Latv. SSR. ser. Fiz. Tekhn. Nauk* No. 3, 49 (1967).
- ### RADIANT HEAT TRANSFER
- L. M. BIBERMAN, V. S. VOROB'EV, A. N. LAGAR'KOV, V. P.

- STULOV, G. F. TELENIN, E. G. SHAPIRO and T. YAKUBOV, Air flow behind the front of a strong shock wave including the effects of non-equilibrium ionization and radiation, *Izv. Akad. Nauk SSSR, Mekh. Zhidk. Gaza*. No. 6, 46 (1967).
- S. P. DETKOV, Radiation in a non-gray gas layer between gray walls, *Inzh.-Fiz. Zh.* 15, 422 (1968).
- N. V. FEDOROVICH, On effect of convection in radiation heating of a falling dispersed material, *Problems of Intensification of Heat and Mass Transfer in Drying and Thermal Processes*. Minsk (1967).
- S. G. IL'YASOV and V. V. KRASNIKOV, Distribution of radiation in capillary-porous colloidal bodies, *Inzh.-Fiz. Zh.* 15, 272 (1968).
- S. A. MEREKALOV and YU. K. BULAVIN, Determination of optical coefficients of thin fibrous materials, *Inzh.-Fiz. Zh.* 14, 1014 (1968).
- A. G. PAVEL'EV, On thermal radio-emission of bodies limited by statistically rough surfaces, *Radiotekhn. Elektron.* 12, 1178 (1967).
- V. A. PETROV, V. YA. CHEKHOVSKOI, A. E. SHEINDLIN, V. A. NIKOLAEVA and L. P. FOMINA, Integral hemispherical emissivity, monochromatic ($\lambda = 0,65$ mkm) emissivity and specific electric resistance of zirconium and niobium carbides in the temperature range from 1200 to 3500°K, *Teplofiz. Vysok. Temp.* 5, 995 (1967).
- YU. A. POPOV, Radiation of an isothermal sphere including the effect of dispersion, *Inzh.-Fiz. Zh.* 15, 293 (1968).
- S. M. REPRINTSEVA and N. V. FEDOROVICH, Radiant heat transfer of disperse free falling materials, *Problems of Intensification of Heat and Mass Transfer in Drying and Thermal Processes*. Minsk (1967).
- V. V. SOBOLEV, Diffusion of radiation in a highly stretched scattering indicatrix, *Dokl. Akad. Nauk SSSR* 177, 812 (1967).
- YU. A. SURINOV and S. V. KHOROL'SKII, The study of local and average angular radiation coefficients for a couple of concentric cylinders of finite length, *Inzh.-Fiz. Zh.* 14, 1018 (1968).
- YU. A. SURINOV and A. A. PETROVSKII, Application of a new calculation method of local radiation characteristics for study of radiant heat transfer in a chamber of square cross-section, *Teplofiz. Vysok. Temp.* 5, 1040 (1967).
- YU. A. SURINOV and A. A. PETROVSKII, Application of a new method of numerical determination of local radiation characteristics for the study of radiant heat transfer in a chamber of square cross-section with non-adiabatic lining, *Izv. Akad. Nauk SSSR, Energ. Transport* No. 6, 124 (1967).
- G. V. VORONKOV, YU. V. VIDIN, E. A. KONDRATIEV and G. P. BOIKOV, Laws of heat distribution in bodies of finite sizes and their application to radiation heating, *Inzh.-Fiz. Zh.* 15, 268 (1968).
- G. A. ZHOROV, On coupling between emissivity and specific electric resistance in metals, *Teplofiz. Vysok. Temp.* 5, 987 (1967).
- boiling, *Heat Transfer and Hydrodynamics in Two-phase Media*. Kiev (1967).
- L. D. BOIKO, Hydraulic resistance in condensation of pure steam and steam from vapour-gas mixture in a horizontal tube, *Teploenergetika* No. 1, 41 (1968).
- A. I. BUTUZOV, S. N. FAINZIL'BERG, M. K. BEZRODNYI, P. P. KUDELYA, N. I. STOGNII and V. I. USENKO, Experimental study of heat transfer in Freon-12 boiling in the field of action of centrifugal forces, *Inzh.-Fiz. Zh.* 15, 302 (1968).
- A. I. BUTUZOV, S. N. FAINZIL'BERG, M. K. BEZRODNYI, N. I. STOGNII and P. P. KUDELYA, On methods of heat transfer investigation in boiling of Freons in a centrifugal field, *Heat Transfer and Hydrodynamics in Two-phase Media*, Kiev (1967).
- G. N. DANILOVA and A. V. KUPRIYANOVA, Heat transfer coefficients in boiling of Freons C-318 and 21 on a horizontal tube, *Kholod. Tekhnika* No. 11, 15 (1967).
- V. G. D'YAKONOV and A. G. USMANOV, Study of the effect of a high-frequency electromagnetic field upon heat transfer in boiling, *Inzh.-Fiz. Zh.* 15, 484 (1968).
- V. A. GRIGOR'EV, A. S. DUDKEVICH, A. G. ILLARIONOV, YU. M. PAVLOV, V. G. PRON'KO and YA. G. VINUKUROV, Experimental study of boiling of some cryogenic liquids on an irrigated heating surface, *Dokl. Nauchno-Tekhn. Konfer. MEI (Mosk. Energ. In-t)*, M. (1967).
- T. A. KOLACH, R. KH. SHARIPOV and V. V. YAGOV, Heat transfer study in water boiling when the latter is supplied to the heating surface by a capillary-porous body at lower pressures, *Inzh.-Fiz. Zh.* 14, 975 (1968).
- R. YA. LADIEV, Variation of heat transfer with time under different hydrodynamic operating conditions of an evaporator with artificial circulation, *Heat Transfer and Hydrodynamics in Two-phase Media*. Kiev (1967).
- R. YA. LADIEV, Variation of heat transfer with time under different hydrodynamic operating conditions of an evaporator with natural circulation, *Heat Transfer and Hydrodynamics in Two-phase Media*. Kiev (1967).
- B. I. LEONCHIK, E. K. TYNBYBEKOV and V. P. MAYAKIN, Evaporation of drops from a gas suspension stream, *Dokl. Nauchno-Tekhn. Konfer. MEI (Mosk. Energetich. In-T)*, M. (1967).
- B. I. LEONCHIK, E. K. TYNBYBEKOV, V. A. STREL'TSOV and V. P. MAYAKIN, Study of evaporation of dispersed fluid in a medium of superheated stream, *Dokl. Nauchno-Tekhn. Konfer. MEI (Mosk. Energ. In-t)*, M. (1967).
- L. A. LEONT'eva and V. YA. GAL'TSOV, On heat transfer investigation in boiling of solutions in a vertical tube under conditions of forced motion, *Khim. Neft. Mashinost.* No. 12, 29 (1967).
- G. P. NIKOLAEV and V. P. SKRIPOV, Generalization of experimental data on critical conditions on immersed surfaces with the use of the thermodynamic similarity theory, *Inzh.-Fiz. Zh.* 15, 46 (1968).
- I. G. PLIT, On calculation of mass transfer for an evaporating drop of a large diameter in horizontal motion, *Khim. Mashinost. (Kiev) vvp.* 3, 113 (1966).
- V. F. STEPANCHUK, On the number of condensation centres, *Inzh.-Fiz. Zh.* 15 52 (1968).
- Study of heat transfer at boiling in tubes of small diameter.

TRANSFER PROCESSES INVOLVING PHASE CHANGES

A. F. BABITSKII, Onset of vapour bubbles in cavitation and

- Dokl. Nauchn.-Tekhn. Konfer. MEI (Mosk. Energ. In-t)*, M. (1967).
- N. YU. TOBLEVICH, I. I. SAGAN and N. A. PRYADKO, On heat transfer of water-alcohol mixtures in pool boiling, *Izvt. Vyssh. Ucheb. Zaved., Pishchev. Tekhnolog.* No. 6, 115 (1967).
- V. I. TOLUBINSKII and B. YA. FEDORCHENKO, Effect of pressure and subcooling on critical heat transfer conditions in pool boiling of liquid, *Heat Transfer and Hydrodynamics in Two-phase Media*, Kiev (1967).
- V. I. TOLUBINSKII and YU. N. OSTROVSKII, Mechanism of heat transfer in boiling of binary mixtures, *Heat Transfer and Hydrodynamics in Two-phase Media*, Kiev (1967).
- L. L. TOVAZHNYANSKII, L. M. KOVALENKO and A. R. YASTREBENETSKII, Study of a steam condensation process in channels of a plate heat exchanger, *Khim. Mashinostr. (Kiev)* vyp. 3, 73 (1966).
- D. G. TSKHVIRASHVILI, A theory of distribution of non-volatile substances between boiling water and steam in equilibrium with it, *Soobshchen. Akad. Nauk Gruz. SSR* 46, 399 (1967).
- conducting gases, *Trudy LPI (Leningr. Politekhn. In-t)* No. 280, 44 (1967).
- A. L. MOSSE, Peculiarities of advancement of chemical reactions in subliming hybrid systems, *Zh. Prikl. Mekh. Tekhn. Fiz.* No. 5, 45 (1967).
- B. S. SOROKA and A. E. ERINOV, Heat transfer in furnace chambers with flat-flame burners, *Gazov. Prom.* No. 12, 26 (1967).
- P. A. TESNER and A. M. TSYBULEVSKII, Gasification of dispersed carbon in diffusive hydrocarbon flames. III. Flames of acetylene-hydrogen, acetylene-steam mixtures, *Fiz. Goren. Vzr.* 3, 261 (1967).
- G. A. VARSHAVSKII and E. M. GERMEIER, A diffusive theory of burning of a drop of liquid hydrogen, *Fiz. Goren. Vzr.* 3, 236 (1967).
- M. I. VERBA, Peculiarities of heat and mass transfer during gas flow in a tube accompanied by homogeneous chemical reactions, *Dokl. Nauchno-Tekhn. Konfer. MEI (Mosk. Energetich. In-t)*, M. (1967).
- V. N. VORGACHEV and M. I. VERBA, Mathematical description of heat transfer at forced liquid motion with a simultaneous chemical reaction of finite-rate, *Dokl. Nauchno-Tekhn. Konfer. . . MEI (Mosk. Energetich In-t)*, M. (1967).

TRANSFER PROCESSES INVOLVING CHEMICAL CHANGES AND COMBUSTION

- T. I. ALEKSEEVA, M. A. GUREVICH and E. S. OZEROV, Inflammation of an aluminium particle, *Trudy LPI (Leningr. Politekhn. In-t)* No. 280, 98 (1967).
- V. A. ARUTYUNOV and I. L. VERTLIB, Calculation of a diffusive gas flame, formed by a 'tube-in-tube burner', *Izvt. Vyssh. Ucheb. Zaved., Chern. Metallurg.* No. 7, 165 (1967).
- S. K. ASLANOV, One-dimensional stability of normal burning of gases, *Inzh.-Fiz. Zh.* 15, 298 (1968).
- S. K. ASLANOV, Stability of burning of disperse fuel in an engine chamber, *Inzh.-Fiz. Zh.* 15, 211 (1968).
- N. A. BOIKOV, P. S. ZVEZDIN and L. B. REZNIK, Some investigation results of inflammation of acetylene-air mixtures by heated particles, *Fiz. Goren. Vzr.* 3, 255 (1967).
- O. N. BRYUKHANOV and N. P. BURKOVA, Influence of wall temperature of a flame conduit on flame detachment, *Gazov. Prom.* No. 12, 31 (1967).
- A. I. CHERNOGOLOV, Determination of flame boundaries by change in its radiation capacity (in an open-hearth furnace), *Trudy In-ta Metallurg. (Ural'sk Filial Akad. Nauk SSSR)* vyp. 13, 127 (1966).
- M. A. GUREVICH and B. I. SOTNICHENKO, On transition of burning from the surface of a metallic particle into the vapour phase, *Trudy LPI (Leningr. Politekhn. In-t)* No. 280, 91 (1967).
- L. K. GUSACHENKO, Burning of fuels with non-isotropic thermal conductivity, *Fiz. Goren. Vzr.* 3, 310 (1967).
- S. A. KAGANOV, On a combustion theory of gases and condensed substances, *Zh. Prikl. Mekh. Tekhn. Fiz.* No. 5, 111 (1967).
- A. I. LEONT'EV, E. P. VOLCHKOV, E. G. ZAULICHNYI and E. I. SINAIKO, Experimental determination of entrainment velocity of graphite under non-isothermal conditions, *Fiz. Goren. Vzr.* 3, 248 (1967).
- YU. P. LUN'KIN and S. B. KOLESKO, Vibration-dissociation relaxation in a multicomponent mixture of viscous heat
- MASS TRANSFER
- A. A. BOROVKOV, On a convergence in diffusion processes. The probability law and its applications, *Inzh.-Fiz. Zh.* 12, 458 (1967).
- N. E. GOROBTSOVA, A new method of determination of moisture diffusion coefficients in moist materials, *Inzh.-Fiz. Zh.* 15, 253 (1968).
- V. N. KHARCHENKO, Heat transfer inside porous material under unsteady-state conditions, *Inzh.-Fiz. Zh.* 15, 149 (1968).
- YU. A. POPOV and YU. V. ALEKSEEV, On gas diffusion kinetics in a porous electrode, *Elektrokhimiya* 3, 1471 (1967).
- A. YA. SHINYAEV and YU. E. UGASTE, The methods of calculation of diffusivity in diffusion from a vapour phase, *Inzh.-Fiz. Zh.* 15, 60 (1968).
- E. A. ZHELEZNYAK, G. K. FILONENKO, L. M. NIKITINA and A. I. CHUPRIN, Thermodynamic parameters and coefficients of mass transfer of some colloid capillary-porous bodies, *Problems of Intensification of Heat and Mass Transfer in Drying and Thermal Processes*, Minsk (1967).
- SIMULTANEOUS HEAT AND MASS TRANSFER
- V. N. KOCHERGIN and O. A. BALYSHEV, Formation of moisture and temperature fields in the process of heat and mass transfer of hydrothermal solutions and rocks, *Inzh.-Fiz. Zh.* 15, 260 (1968).
- P. M. KOLESNIKOV, Reduction of equations of nonlinear unsteady-state high-intensity heat and mass transfer to equivalent linear equations. Analogies of high-intensity heat and mass transfer, *Inzh.-Fiz. Zh.* 15, 214 (1968).
- P. M. KOLESNIKOV, Simple and shock waves in non-linear high-intensity unsteady-state heat and mass transfer, *Inzh.-Fiz. Zh.* 15, 501 (1968).

A. V. LUIKOV, Heat and mass transfer in capillary-porous bodies, *Heat Transfer Problems*, M. (1967).

AEROHYDRODYNAMICS

- YU. S. ABRAMOV and R. M. KATS, On spatial motion of an interface of two incompressible fluids in a porous medium, *Izv. Akad. Nauk SSSR, Mekhanika Zhidkosti Gaza* No. 6, 176 (1967).
- G. A. ADADUROV, A. N. DREMIN, G. I. KANEL and S. V. PERSHIN, Determination of shock wave parameters in a substance contained in cylindrical ampoules, *Fiz. Goren. Vsr.* 3, 281 (1967).
- N. I. AKATNOV, Laminar and turbulent jets, *Trudy LPI (Leningr. Politekh. In-t)* No. 280, 83 (1967).
- V. P. ANDREEV, The method of successive approximations for one-dimensional unsteady-state problems of gas dynamics, *Izv. Akad. Nauk SSSR, Mekhanika Zhidkosti Gaza* No. 6, 31 (1967).
- V. B. ASTAF'EV, A. M. BAKLASTOV and L. I. ARKHIPOV, Study of heat transfer in condensation on a rotating disc, *Dokl. Nauchno-Tekhn. Konf. MEI (Mosk. Energetich. In-t)*, M. (1967).
- L. S. ATROSHCHENKO and S. M. VORONINA, Hydrodynamics of processes in bubbling reactors with external potential fields, *Inzh.-Fiz. Zh.* 15, 416 (1968).
- V. S. AVDUEVSKII and V. N. KALASHNIK, Calculation of friction and heat transfer in a turbulent boundary layer, *Izv. Akad. Nauk SSSR, Energetika Transport* No. 5, 9 (1967).
- A. M. BAKLASTOV, V. B. ASTAF'EV and L. I. ARKHIPOV, On flow of a condensate film on a rotating horizontal disc, *Dokl. Nauchno-Tekhn. Konfer. MEI (Mosk. Energetich. In-t)*, M. (1967).
- B. A. BALANIN, Supersonic jet outflow into channels of various shapes, *Inzh.-Fiz. Zh.* 15, 91 (1968).
- T. F. BEKMURATOV, On efficiency of gas screen in a circular tube with an adiabatic wall, *Inzh.-Fiz. Zh.* 14, 1096 (1968).
- N. M. BELYANIN, Determination of a body configuration with a minimum heat flux at laminar flow conditions in a boundary layer, *Izv. Akad. Nauk SSSR, Mekhanika Zhidkosti Gaza* No. 6, 37 (1967).
- I. YU. BRAILOVSKAYA, A. L. KRYLOV, T. V. KUSKOVA and L. A. CHUDOV, Investigations on differential methods of calculating viscous flows carried out on at the Computation Centre of the Moscow State University in 1958-1966, *Izv. Sib. Otd. Akad. Nauk SSSR* No. 8, ser. Tekhn. Nauk vyp. 2, 87 (1967).
- V. V. BREEV and A. V. GUBAREV, Radial-vortex motion of anisotropic conducting incompressible liquid in a magnetic field, *Teplofiz. Vysok. Temp.* 5, 1094 (1967).
- YU. A. BUEVICH and A. I. LEONOV, Fluid filtration in a medium of random porosity, *Izv. Akad. Nauk SSSR, Mekhanika Zhidkosti Gaza* No. 6, 167 (1967).
- A. P. BYRKIN and I. I. MEZHIROV, On calculation of viscous gas flow in a duct, *Izv. Akad. Nauk SSSR, Mekhanika Zhidkosti Gaza* No. 6, 156 (1967).
- V. V. DANENBERG and V. I. PLYUTINSKII, Refinement of solution of transient heat transfer in turbulent flow, *Trudy (Vsesoyuzn. TSNII Kompleksn. Avtomatiz.)* vyp. 16, 279 (1967).
- K. B. DZHAKUPOV and B. G. KUZNETSOV, Numerical calculation of a two-dimensional non-steady viscous incompressible flow, *Izv. Sib. Otd. Akad. Nauk SSSR* No. 8, ser. Tekhn. Nauk vyp. 2, 49 (1967).
- K. E. DZHAUGASHTIN, Jet distribution along a porous wall, *Inzh.-Fiz. Zh.* 14, 1006 (1968).
- YU. N. ERMAK and V. YA. NEILAND, Calculation of heat transfer at a frontal surface of a blunt body in hypersonic flow, *Izv. Akad. Nauk SSSR, Mekhanika Zhidkosti Gaza* No. 6, 153 (1967).
- A. I. EROFEEV, Effect of roughness on interaction between a gas flow and the surface of a solid, *Izv. Akad. Nauk SSSR, Mekhanika Zhidkosti Gaza* No. 6, 82 (1967).
- M. P. FALUNIN and G. S. UL'YANOV, A triangular wing in supersonic flow, *Izv. Akad. Nauk SSSR, Mekhanika Zhidkosti Gaza* No. 6, 138 (1967).
- G. V. FILIPPOV and V. G. SHAKHOV, Some problems of an unsteady-state three-dimensional laminar boundary layer in magnetic hydrodynamics, *Zh. Prikl. Mekh. Tekhn. Fiz.* No. 6, 62 (1967).
- M. S. FOMICHEV, Pulsation of dynamic pressure and oscillation of a shutter with jet efflux into a channel under unsteady-state conditions, *Izv. Akad. Nauk SSSR, Energetika Transport* No. 6, 145 (1967).
- V. V. GALAKTIONOV and M. I. VERBA, Coefficients of heat and momentum transfer in the flow of a reacting mixture in a tube, *Dokl. Nauchno-Tekhn. Konfer. MEI (Mosk. Energ. In-t)*, M. (1967).
- A. M. GOLOVIN, Lagrange equations for a bubble system in a fluid of low viscosity, *Zh. Prikl. Mekh. Tekhn. Fiz.* No. 6, 20 (1967).
- A. L. GONOR, Supersonic flow around triangular wings with surface ribs, *Prikl. Mat. Mekh.* 31, 1050 (1967).
- D. N. GORELOV and L. V. DOMINAS, Determination of unsteady aerodynamic forces for a plate grid in subsonic gas flow, *Izv. Akad. Nauk SSSR, Mekhanika Zhidkosti Gaza* No. 6, 21 (1967).
- I. N. GORSHKOVA and K. P. STANYUKOVICH, Initial stage of two-dimensional non-steady gas flow, *Dokl. Akad. Nauk SSSR* 176, 1270 (1967).
- E. I. GRIGOLYUK and A. G. GORSHKOV, Displacement of a rigid sphere under the action of acoustic pressure wave, *Dokl. Akad. Nauk SSSR* 177, 539 (1967).
- V. P. GROMOV, B. P. KOLOBOV and A. F. DIMITRIEVA, Some design diagrams of a two-dimensional laminar boundary layer on bodies of revolution, *Izv. Sib. Otd. Akad. Nauk SSSR* No. 8, ser. Tekhn. Nauk vyp. 2, 101 (1967).
- V. E. GUBIN and V. S. LEVIN, Fluid flow in the entry section of a circular tube, *Inzh.-Fiz. Zh.* 15, 98 (1968).
- M. A. GUSEIN-ZADE, L. I. DRUGINA and M. A. MUSAEV, Transient liquid flow in a plate with a cover of non-homogeneous penetration, *Trudy (Mosk. In-t Neftekhim. i Gazov. Prom.)* vyp. 66, 117 (1967).
- N. L. KAFENGAUZ and M. I. FEDOROV, Interconnection between the temperature of a surface under cooling and the frequency of self-oscillations of pressure in heat transfer to a turbulent liquid flow, *Inzh.-Fiz. Zh.* 15, 455 (1968).
- KH. E. KALLIS and A. B. TSINOBER, Plane-parallel flow of viscous incompressible fluid in ducts under the influence

- of a transverse magnetic field, *Izv. Sib. Otd. Akad. Nauk SSSR* No. 8, ser. *Tekhn. Nauk* vyp. 2, 16 (1967).
- V. A. KAMINSKII, L. E. KONONENKO and S. F. TIMASHEV, On diffusion in a laminar flow, *Zh. Fiz. Khimii* **41**, 2760 (1967).
- G. A. KOLESNIKOV, A calculation method of unsteady-state aerodynamic properties of a supporting surface under high subsonic velocity *Izv. Akad. Nauk SSSR, Mekhanika Zhidkosti i Gaza* No. 6, 118 (1967).
- A. N. KOLMOGOROV, Local turbulence structure in incompressible viscous fluid at very large Re numbers, *Uspekhi Fiz. Nauk* **93**, 476 (1967).
- Z. I. KRAVETS, On calculation of a curvilinear diffuser for an air cooler (heat engine), *Trudy Mosk. In-ta Inzhen. Zh.-d. Transporta* vyp. 251, 166 (1966).
- M. V. KRAVTSOV, Resistance to a free developed motion of a sphere in a viscous medium, *Inzh.-Fiz. Zh.* **15**, 464 (1968).
- T. V. KUSKOVA and L. A. CHUDOV, Increasing the accuracy of approximate boundary conditions for a vortex, *Izv. Sib. Otd. Akad. Nauk SSSR* No. 8, ser. *Tekhn. Nauk* (2), 92 (1967).
- V. R. KUZNETSOV, On probability density of velocity difference at two points in a homogeneous isotropic turbulent flow, *Prikl. Mat. Mekh.* **31**, 1069 (1967).
- B. G. KUZNETSOV and V. P. GROMOV, On a difference method for Navier-Stokes' equations, *Izv. Sib. Otd. Akad. Nauk SSSR* No. 8, ser. *Tekhn. Nauk* (2), 29 (1967).
- YU. V. LAPIN, Processes of turbulent transfer in liquids and gases, *Trudy LPI (Leningr. Politekh. In-t)* No. 288, 70 (1967).
- A. I. LEONTIEV, B. P. MIRONOV and V. A. MUKHIN, Effect of boundary conditions upon the law of turbulent boundary layer heat transfer, *Inzh.-Fiz. Zh.* **15**, 5 (1968).
- YU. L. LEVKOVSKII and G. G. SUDAKOVA, The effect of a solid wall on the closing of a spherical cavity in cavitation *Inzh.-Fiz. Zh.* **15**, 241 (1968).
- L. G. LOITSYANSKII, Universal equations for the laminar boundary layer theory and parametric methods of their integration, *Trudy LPI (Leningr. Politekh. In-t)* No. 280, 5 (1967).
- V. M. LYUBOSHITS, On the attenuation law of a plane shock wave in a dense medium, *Fiz. Goren. Vsr.* **3**, 299 (1967).
- O. G. MARTYNIENKO, I. S. REVZIN, V. A. GERTSOVICH and V. E. FERTMAN, Effect of distribution of turbulence intensity in a boundary layer on heat transfer of a plate *Problems of Intensification of Heat and Mass Transfer in Drying and Thermal Processes*, Minsk (1967).
- M. M. MENDEL'SON and M. I. SHVIDLER, On dispersive filtration effects in media with random nonuniformities, *Izv. Akad. Nauk SSSR, Mekhanika Zhidkosti Gaza* No. 6, 181 (1967).
- B. P. MIRONOV, A. V. FAFURIN and I. L. KUZNETSOV, Measurement of velocity in a boundary layer of high-temperature gas by the electro-optical method, *Fiz. Goren. Vsr.* **3**, 312 (1967).
- A. KH. MIRZADZHAN-ZADE, Z. M. AKHMEDOV and T. A. SAMEDOV, Differential equations of filtration of gas-liquid systems including the effect of mass transfer of residual water, *Dokl. Akad. Nauk SSSR* **176**, 1035 (1967).
- A. S. MONIN, Equations of turbulent motion, *Prikl. Mat. Mekh.* **31**, 1057 (1968).
- A. I. MOROZOV and A. P. SHUBIN, On boundary layers in flows of well conducting non-viscous plasma, *Zh. Prikl. Mekh. Tekhn. Fiz.* No. 5, 14 (1967).
- I. I. MOROZOV and P. P. VASIL'EV, Determination of hydraulic characteristics of end effects for a flow with a small steam content, *Teplotnergetika* No. 1, 75 (1968).
- V. S. NIKOLAEV, An optimum profile in a viscous hypersonic flow, *Izv. Akad. Nauk SSSR, Mekhanika Zhidkosti Gaza* No. 6, 129 (1967).
- P. YA. NOVATSKII, Studies of the field of magnetohydrodynamic generators in Poland, *Teplotfiz. Vysok. Temp.* **5**, 1102 (1967).
- E. A. NOVIKOV, Kinetic equations for a vorticity field, *Dokl. Akad. Nauk SSSR* **177**, 299 (1967).
- O. YU. POLYANSKII, Aerodynamic characteristics of a thin wedge in a hypersonic non-equilibrium flow, *Izv. Akad. Nauk SSSR, Mekhanika Zhidkosti Gaza* No. 6, 133 (1967).
- A. S. POPEL, Calculation of a boundary layer on a rotating disc with inclusion of the Hall effect, *Izv. Akad. Nauk SSSR, Mekhanika Zhidkosti Gaza* No. 6, 71 (1967).
- B. T. PORODNOV and P. E. SUETIN, Flow of rarefied gas between two parallel planes, *Izv. Akad. Nauk SSSR, Mekhanika Zhidkosti Gaza* No. 6, 93 (1967).
- V. T. PRISNYAKOV, Discharge from a pipe of a fluid changing its aggregate state, *Inzh.-Fiz. Zh.* **14**, 1070 (1978).
- D. DZH. RICHARDSON, The method of characteristics for the solution of hydrodynamics equations of two-dimensional unsteady-state flows, *Calculation Methods in Hydrodynamics*, M. (1967).
- G. B. PYKHACHEV, Motion of liquid to a finite filtering hole in a thick stratum, *Zh. Prikl. Mekh. Tekhn. Fiz.* No. 6, 42 (1967).
- O. S. RYZHOV and E. D. TERE'NT'EV, On disturbances resulting from the appearance of buoyancy acting on a body in supersonic flow of a gas, *Prikl. Mat. Mekh.* **31**, 1035 (1967).
- YU. V. SANOKHIN, On dissipative instability of a non-isothermal electroconducting flow between parallel plates in a transverse magnetic field, *Zh. Prikl. Mekh. Tekhn. Fiz.* No. 5, 21 (1967).
- G. D. SEVOST'YANOV, Plane supersonic gas flows with a direct shock jump, *Prikl. Mat. Mekh.* **31**, 1028 (1967).
- I. N. SHTENNIKOVA, G. A. FOMIN, M. KOZHOKARY, G. M. PAVLOV, G. P. BELONOVSKAYA and L. A. KOROTNEVA, Study of hydrodynamic properties of polypropylene sulphide solutions, *Vestn. Leningr. Un-ta* **22**, *Fizika, Khimiya* (4), 93 (1967).
- I. POP, Similarity solutions of the boundary layer equations in the presence of a magnetic field, *Inzh.-Fiz. Zh.* **15**, 134 (1968).
- L. M. SIMUNI, Solution of some problems of viscous fluid flow around a cylinder and a sphere, *Izv. Sib. Otd. Akad. Nauk SSSR* No. 8, ser. *Tekhn. Nauk* (2), 23 (1967).
- E. G. SINAIKII, Heat transfer in three-layer liquid flow in a two-dimensional conduit, *Izv. Akad. Nauk SSSR, Mekhanika Zhidkosti Gaza* No. 6, 162 (1967).
- G. I. SIVASHINSKII, On the effect of a hydrodynamic field on stability of laminar flames, *Zh. Prikl. Mekh. Tekhn. Fiz.* No. 6, 14 (1967).
- K. P. STANYUKOVICH and K. DZHUSUPOV, Unsteady-state

- gas outflow in a constant field of gravity, *Dokl. Akad. Nauk SSSR* **177**, 804 (1967).
- L. G. STEPANYANTS, Some methods of the gas dynamic theory of lubrication, *Trudy LPI (Leningr. Politekh. In-t)* No. 280, 27 (1967).
- A. A. STOLYAROV and N. B. KONDUKOV, Density of adiabatic flows of evaporating liquids, *Inzh.-Fiz. Zh.* **15**, 385 (1968).
- N. B. TREINER, On flattening of plane incompressible flow by a rotating circular grid of thin curved blades with radial direction at the entrance, *Izv. Akad. Nauk SSSR. Mekhanika Zhidkosti Gaza* No. 6, 104 (1967).
- V. G. TSEPILEVICH, Analogue of Prandtl-Meier flow in a magnetic field parallel to the velocity field, *Zh. Prikl. Mekh. Tekhn. Fiz.* No. 5, 101 (1967).
- L. I. URBANOVICH, Heat transfer in laminar incompressible liquid flow in an annulus with asymmetric boundary conditions of the second kind relatively to the axis, *Inzh.-Fiz. Zh.* **15**, 326 (1968).
- T. S. VARZHANSKAYA and L. A. CHUDOV, Flow of viscous incompressible fluid near a sharp leading edge of a flat plate, *Izv. Sib. Otd. Akad. Nauk SSSR* No. 8, ser. *Tekhn. Nauk*.
- A. B. VATAZHIN and E. K. KHOLSHCHEVNIKOVA, An anisotropic conducting flow along a channel in the entrance region of a magnetic field, *Zh. Prikl. Mekh. Tekhn. Fiz.* No. 5, 9 (1967).
- M. I. VERBA and V. N. VORGACHEV, On effect of homogeneous chemical reaction rate upon temperature and concentration distribution in the wall region of a circular tube with a turbulent gas flow, *Inzh.-Fiz. Zh.* **15**, 107 (1968).
- V. I. VISHNYAKOV, A. M. MAKAROV, L. K. MARTINSON and K. B. PAVLOV, Interferometric study of heat transfer in turbulent jet flows, *Inzh.-Fiz. Zh.* **15**, 193 (1968).
- E. G. VORONTSOV, Some peculiarities of temperature distribution across a falling film, *Inzh.-Fiz. Zh.* **15**, 540 (1968).
- YU. I. YALAMOV, I. N. IVCHENKO and B. V. DERYAGIN, Gaskinetic calculations of the thermal sliding velocity of a gas near a solid surface, *Dokl. Akad. Nauk SSSR* **177**, 74 (1967).
- N. N. YANENKO, V. D. FROLOV and V. E. NEUVAZHAEV, On application of the disintegration method for the numerical calculation of motion of a heat conducting gas in curvilinear co-ordinates, *Izv. Sib. Otd. Akad. Nauk SSSR* No. 8, ser. *Tekhn. Nauk* (2), 74 (1967).
- I. K. YAKUSHEV, Decay of an arbitrary disturbance in a duct with a stepwise change in cross-sectional area, *Izv. Sib. Otd. Akad. Nauk SSSR* No. 8, ser. *Tekhn. Nauk* (2), 109 (1967).
- I. K. YAKUSHEV, On numerical calculation of unsteady-state gas flow in one-dimensional approximation in ducts with a stepwise change in cross-sectional area, *Izv. Sib. Otd. Akad. Nauk SSSR* No. 8, ser. *Tekhn. Nauk* (2), 39 (1967).
- V. S. YUFEROV, A laminar boundary layer of compressible electroconducting gas in a transverse magnetic field, *Izv. Akad. Nauk SSSR. Mekhanika Zhidkosti Gaza* No. 6, 64 (1967).
- N. D. ZABLOTSKII, Approximate solution of the Reynolds equation for radial gas bearing of finite length, *Izv. Akad. Nauk SSSR. Mekhanika Zhidkosti Gaza* No. 6, 150 (1967).
- V. E. ZAKHAROV and N. N. FILONENKO, Weak turbulence of capillary waves, *Zh. Prikl. Mekh. Tekhn. Fiz.* No. 5, 62 (1967).
- YU. G. ZHULEV and N. A. KOSARENKO, Theoretical study of laminar film condensation on an isothermal surface of a flowing saturated vapour, *Inzh.-Fiz. Zh.* **15**, 537 (1968).

RHEOPHYSICS

(PHYSICAL RHEOLOGICAL SYSTEMS)

- G. M. BARTENEV and N. V. ERMILOVA, On the theory of rheological properties of solidlike dispersed structures, *Kolloidn. Zh.* **29**, 771 (1967).
- L. A. GALIN, Deformation of an orthotropic elastic-viscous body under two-dimensional conditions, *Dokl. Akad. Nauk SSSR* **177**, 808 (1967).
- N. I. INSAROVA, On viscosity of non-Newtonian media in the deformation of a pure shear, *Mekh. Polimerov (Akad. Nauk Latv. SSR)* No. 5, 927 (1967).
- I. S. KAINARSKII, A. G. KARAULOV and G. E. GNATYUK, Dependence of rheological and technological properties of suspensions on preliminary preparation of alumina, *Kolloidn. Zh.* **29**, 810 (1967).
- YU. V. KLAPOVSKII and YU. A. MACHIKHIN, Rheological properties of a cream pomade, *Khlebopekarn. Kondit. Prom.* No. 9, 20 (1967).
- M. A. KOLTUNOV, Determination of characteristics of elastic-viscous media from quasi-static experiments, *Mekh. Polimerov (Akad. Nauk Latv. SSR)* No. 5, 803 (1967).
- A. V. LUIKOV, Z. P. SHUL'MAN and B. I. PURIS, External convective mass transfer of a plate in a non-Newtonian fluid, *Inzh.-Fiz. Zh.* **14**, 961 (1968).
- M. I. MISHCHENKO and A. V. SAMOILOV, Study of polymer motion and heat transfer in a screw extruder, *Khim. Mashinostr. (Kiev)*, (3), 26 (1966).
- I. R. MURADOV, A. A. AKHMEDOV, C. T. GASANOV, S. S. KASUMOV and T. I. DZHALILOV, Study of squeezing out of a visco-plastic bed in a filter medium (in drilling), *Azerb. Neft. Khoz-vo* No. 6, 16 (1967).
- E. F. OZEROVA and L. M. SIMUNI, Influence of non-isothermal conditions on boundary layer separation in a viscous incompressible liquid, *Inzh.-Fiz. Zh.* **14**, 1060 (1968).
- E. O. REGER, P. G. ROMANOV and N. B. RASHKOVSKAYA, A problem in outflow of elasto-plastic thixotropic materials (pastes of dyes and pigments) from a vibration feeder, *Zh. Prikl. Khim.* **40**, 2605 (1967).
- YA. RUSHCHITSKII, On a problem in the two-dimensional theory of visco-elasticity, *Prikl. Mekh. (Akad. Nauk USSR)* **3**(12), 55 (1967).
- YA. G. SAPUNKOV, Similarity solutions of a boundary layer of non-Newtonian liquid in magnetic hydrodynamics, *Izv. Akad. Nauk SSSR. Mekhanika Zhidkosti Gaza* No. 6, 77 (1967).
- I. V. SAVCHENKO, Comparison of rheological equations of state, obtained with the help of capillary and rotary viscometers, *Kolloidn. Zh.* **29**, 887 (1967).

- T. D. SHERMERGOR, Rheological characteristics of elastic-viscous materials possessing asymmetric relaxation spectra, *Inzh. Zh. Mekhanika Tverdogo Tela* No. 5, 73 (1967).
- O. F. SHELNSKI and M. A. SHERYSHEV, Calculation of non-stationary temperature stresses in a plate of visco-elastic material whose properties do not obey the principle of time-temperature similarity, *Inzh.-Fiz. Zh.* 15, 113 (1968).
- Z. P. SHUL'MAN, Symposium on rheology of polymers, *Inzh.-Fiz. Zh.* 15, 170 (1968).
- M. M. SOLDATOV, A non-linear theory of visco-elasticity with symmetric functions of influence, *Mekh. Polimerov (Akad. Nauk Latv. SSR)* No. 5, 921 (1967).
- M. P. VOLAROVICH, I. I. LISHTVAN and V. A. FORIKO, Effect of content of a solid phase and temperature on rheological properties of peat, *Kolloidn. Zh.* 29, 786 (1967).
- N. KH. ZINNATULLIN, K. D. VACHAGIN and N. V. TYABIN, Two-dimensional flow of non-Newtonian fluid over an open surface of a fast rotating flat disc, *Inzh.-Fiz. Zh.* 15, 234 (1968).
- B. I. LEONCHIK, Problems on kinetics and dynamics of drying of single drops of solutions, *Dokl. Nauchno-Tekhn. Konfer. MEI (Mosk. Energet. In-t)*, M. (1967).
- B. I. LEONCHIK, O. L. DANILOV and R. I. GAVRILOVA, Oscillatory regime of drying of fine materials, *Dokl. Nauchno-Tekhn. Konfer. MEI (Mosk. Energet. In-t)*, M. 14 (1967).
- V. E. LISAI, B. A. KOSTITSYN and A. M. YURCHENKO, New developments in spray-drying of thermosensitive paints, *Zh. Prikl. Khim.* 40, 2835 (1967).
- M. YU. LUR'E, Intensification of the drying, roasting and mixing processes in pneumatic and spraying systems, *Drying Engineering in a Fluidized Bed*, v. 6, M. (1967).
- R. V. LUTSYK and M. F. KAZANSKII, The effect of acoustic low-frequency fields on the intensity of skin drying, *Izv. Vyssh. Ucheb. Zaved., Tekhnolog. Legkoi Prom.* No. 4, 67 (1967).
- I. L. LYUBOSHITS, V. I. KASPER and M. A. KUCHERYAVYI, Study of a process of drying of an industrial article from butyl rubber latex, *Problems of the Intensification of Heat and Mass Transfer in Drying and Thermal Processes*, Minsk (1967).

DRYING PROCESSES

- I. I. CHERNOBYL'SKII and N. V. KOZACHINSKAYA, Some results of study of polycaprolactam by infrared radiation, *Khim. Mashinost. (Kiev)* (3), 65 (1966).
- V. V. KAMENKOVICH and E. P. MEDNIKOV, On the mechanism of acoustic drying of capillary-porous materials, *Akust. Zh.* 13, 450 (1967).
- G. A. KASPARYAN and G. S. KIRKEVICH, Intensification of a process of thermal treatment of colloidal capillary-porous materials, *Inzh.-Fiz. Zh.* 14, 989 (1968).
- V. I. KASPER and R. K. NARKHODZHAEV, Experimental study of drying of sunflower-seeds in the drum of a recirculation dryer, *Izv. Vyssh. Ucheb. Zaved., Pishchev. Tekhnolog.* No. 6, 103 (1967).
- V. N. KISEL'NIKOV, V. YA. DEMSHIN and S. G. SHIROKOV, Study of growth rate and kinetics of drying of urea granule in a fluidized bed, *Izv. Vyssh. Ucheb. Zaved., Khim. Tekhnolog.* 10, 1172 (1967).
- A. A. KORYAGIN, The basic problems and state of development of drying technology, *Technology of Drying in a Suspended Bed*, v. 6, M. (1967).
- G. A. KOVEL'MAN, Finishing stages of drying techniques in the production of fine ceramics, *Steklo i Keramika* No. 12, 9 (1967).
- O. V. KOZLOVSKII, On the choice of a disc atomizer for uniflow dryers, *Trudy (Vologodsk. Molochn. In-t)* (49), 103 (1966).
- L. N. KROTOV and V. N. OSLANOVICH, High-temperature drying of foliage materials, *Derevoobrabat. Prom.* No. 12, 4 (1967).
- F. M. LASHCHIVER and V. V. GRUSHKO, An experiment on wood drying in automatized induction chambers, *Stroit. i Arkhitekt. Uzbekistana* No. 7, 4 (1967).
- P. D. LEBEDEV, On research work carried out at the Faculty of Drying and Heat Exchange Equipment, *Dokl. Nauchno-Tekhn. Konfer. MEI (Mosk. Energet. In-t)*, M. (1967).
- P. D. LEBEDEV, The state of knowledge and perspectives of development of the science and engineering of material drying in USSR, *Izv. Vyssh. Ucheb. Zaved., Energetika* No. 11, 76 (1967).
- I. L. LYUBOSHITS, L. F. PIKUS and N. G. ALKHANASHVILI, Calculation of the kinetics of heating of moist dispersed material in a pneumatic tube with internal heating, *Problems of Intensification of the Heat and Mass Transfer in Drying and Thermal Processes*, Minsk (1967).
- K. D. MAKARENKO, A study of hydrodynamics and drying of ground grass culms in a fluidized bed, *Problems of the Intensification of Heat and Mass Transfer in Drying and Thermal Processes*, Minsk (1967).
- YA. S. OPMAN, Energetic indices in the estimation of the efficiency of driers, *Problems of Intensification of Heat and Mass Transfer in Drying and Thermal Processes*, Minsk (1967).
- I. F. PIKUS, Drying of vegetables in a fluidized bed in the oscillating regime, *Problems of the Intensification of Heat and Mass Transfer in Drying and Thermal Processes*, Minsk (1967).
- P. I. ROMANKOV, Some general aspects of the technology of drying in a fluidized bed, Moscow (1967).

KINETIC THEORY OF GASES AND LIQUIDS

- YU. N. BELYAEV and V. B. LEONAS, Kinetic properties of air and other gases at high temperatures, *Fiz. Goren. Vzr.* 3, 171 (1967).
- YU. N. BELYAEV and V. B. LEONAS, Kinetic properties of dissociating hydrogen, *Teplotfiz. Vysok. Temp.* 5, 1123 (1967).
- S. A. DENISIK, YU. G. MALAMA, L. S. POLAK and R. A. REZVANOV, Application of the Monte-Carlo method to the solution of some problems of physical and chemical kinetics, *Teplotfiz. Vysok. Temp.* 5, 1011 (1967).
- V. M. DUBNER, On calculation of average relative velocity, *Teplotfiz. Vysok. Temp.* 5, 1115 (1967).
- V. S. GALKIN, Application of the Chapman-Enskog method to a two-temperature binary mixture of gases, *Izv. Akad. Nauk SSSR, Mekhanika Zhidkosti Gaza* No. 6, 58 (1967).

- L. G. KHOLUEI, New statistical models for the kinetic theory and methods of their construction, *Mekhanika (Sborn. Perevodov)* 6 (106), 46 (1967).
- E. V. SAMUILOV and N. V. VOSKRESENSKAYA, Integrals of the C+N atom collisions, *Teplofiz. Vysok. Temp.* 5, 983 (1967).
- A. P. SOLODOV and V. P. ISACHENKO, A statistical model of dropwise condensation, *Teplofiz. Vysok. Temp.* 5, 1032 (1967).

THERMAL PROPERTIES

- S. B. AINBINDER and N. G. ANDREEVA, Study of thermal and antifriction properties of compositions based on polyethylene. I. *Mekh. Polimerov (Akad. Nauk Latv. SSR)* No. 5, 873 (1967).
- D. B. BALASHOV, Thermodynamic properties of nitroglycerin powders in the pressure region up to 26000 kg/cm² and temperatures 20-92°, *Zh. Fiz. Khimii* 41, 2793 (1967).
- V. V. BOLOTIN and V. N. MOSKALENKO, Macroscopic coefficients of thermal conductivity and diffusion in microheterogeneous solids, *Zh. Prikl. Mekhan. Tekhn. Fiz.* No. 6, 7 (1967).
- I. I. BYKOV, B. KH. KHAN and V. S. KLIMENKO, Study of some thermal properties of cast crystal-glass materials, *Teplofiz. Vysok. Temp.* 5, 1005 (1967).
- A. M. KERIMOV, Study of isochoric thermal capacity of water and steam at the neighbourhood of the critical point, *Teploenergetika* No. 1, 60 (1968).
- V. M. KUZNETSOV, On the theory of the bulk viscosity coefficient, *Izv. Vyssh. Ucheb. Zaved., Mekhanika Zhidkosti Gaza* No. 6, 89 (1967).
- R. S. LERNER and E. G. KISTER, Thermal properties of aqueous suspensions of clays, *Kolloidn. Zh.* 29, 822 (1967).
- R. S. MIKHAL'CHENKO, A. G. GERZHIN, V. T. ARKHIPOV and N. P. PERSHIN, Dependence of the effective thermal conductivity of multi-layer insulation upon its thickness, *Inzh.-Fiz. Zh.* 15, 526 (1968).
- A. P. NASEKOVSKII, On temperature dependence of the coefficient of thermal expansion of cubic crystals, *Ukr. Fiz. Zh.* 12, 1353 (1967).
- YA. M. NAZIEV, Determination of thermal conductivity and heat capacity of liquids and gases at high parameters by the quasi-stationary method, *Dokl. Akad. Nauk AzSSSR* 23(6), 6 (1967).
- D. S. RASSKAZOV, YU. M. BABIKOV and YA. GUOT, Study of some thermal properties of terphenyl mixtures, *Teploenergetika* No. 1, 50 (1968).
- YU. L. RASTORGUEV and YU. A. GANIEV, Thermal conductivity of solutions of non-electrolytes, *Zh. Fiz. Khimii* 41, 2901 (1967).
- E. P. SHELUDYAKOV, On calculation of C_p, heat capacity of humid vapour, from acoustic data, *Izv. Sib. Otd. Akad. Nauk SSSR* No. 8, ser. *Tekhn. Nauk* (2), 121 (1967).
- A. S. SHIBANOV and N. A. SMOL'KOV, Study of specific heat of cobalt chromite at low-temperature, *Fiz. Tverdogo Tela* 9, 3676 (1967).
- V. V. SHIRSHOVA and V. K. SERIKOV, Determination of heat capacity of posistors, *Inzh.-Fiz. Zh.* 15, 529 (1968).
- V. I. SUBBOTIN, M. N. IVANOVSKII and YU. I. ORLOV, Thermal contact resistance in cooling of conduits by liquid metals, *Teplofiz. Vysok. Temp.* 5, 1025 (1967).
- A. A. TARZIMANOV and V. E. MASHIROV, Experimental study of thermal conductivity of vapours of normal saturated hydrocarbons at temperatures up to 450°C, *Teploenergetika* No. 12, 67 (1967).
- A. N. VASIL'EV, V. V. MATYUKHIN, M. I. PASHKINA, I. T. FILIPPOV and V. I. SHARYPIN, Thermal conductivity of a fixed bed of powders and shavings of different materials, *Teploenergetika* No. 12, 81 (1967).
- D. V. VECHER and A. A. VECHER, Thermodynamic properties of systems of oxides. III. *Zh. Fiz. Khim.* 41(11), 2916 (1967).

EQUIPMENT AND MEASURING METHODS IN TRANSFER PROCESSES

- S. K. AKHUNDOV and A. A. GYLMANOV, Regular thermal regime of three-component spheres and plates, *Izv. Vyssh. Ucheb. Zaved., Priborostr.* 10(11), 105 (1967).
- G. F. ANISIMOVA, V. A. KLIMOVA, I. A. LAVROV and E. P. KRYLOVA, The automatic coulometric determination of gas moisture and hydrogen content in organic substances, *Izv. Akad. Nauk SSSR, ser. Khim.* No. 11, 2556 (1967).
- R. A. BERENTSVEIG and V. V. SHEVCHENKO, Measurement of moisture content of asbestos cement by the method of ultra-high frequency irradiation, *Inzh.-Fiz. Zh.* 14, 1079 (1968).
- A. I. CHERNOGOLOV, S. N. GUSHCHIN and V. B. FETISOV, Design of probe for separate determination of convective and radiant heat transfer, velocity and temperature of gas streams (in open-hearth furnaces), *Trudy In-ta Metallurg. (Ural'sk. Filial Akad. Nauk SSSR)* (13), 102 (1966).
- V. I. DERKACHEV and D. P. LEBEDEV, Measurement of decrease in mass under vacuum by an automatic balance with an inductive detector, *Dokl. Nauchno-Tekhn. Konfer. MEI (Mosk. Energ. In-t)*, M. (1967).
- G. N. DUL'NEV, A. A. MEN' and O. A. SERGEEV, Review of *Theoretical Fundamentals of Measuring Unsteady Temperatures* by N. A. YARYSHEV, *Inzh.-Fiz. Zh.* 15, 351 (1968).
- B. G. D'YACHKOV, Measurement of flame temperature by the deceleration method of α -particles, *Teplofiz. Vysok. Temp.* 5, 1071 (1967).
- V. A. GRISHIN, On the fundamentals of a new method of thermal measurements, *Izv. Vyssh. Ucheb. Zaved., Mashinostr.* No. 6, 70 (1967).
- E. V. ISKRA, An indicator of moisture, *Sudostroenie* No. 12, 43 (1967).
- P. R. ISMATULLAEV, N. U. RIZAEV, M. A. BERLINER and N. R. YUSUPBEKOV, Measurement of moisture of granular materials by the ultra-high frequency method, *Izv. Vyssh. Ucheb. Zaved., Pishchev. Tekhnolog.* No. 6, 133 (1967).
- YA. A. LANDA and E. YA. LITOVSKII, An installation for the investigation of thermal diffusivity of refractory materials, *Chemistry of High-temperature Materials*, L. (1967).
- YU. N. LYAKHOV, Application of the schlieren-method to studying a temperature field in a liquid above a plate with a moving heat source, *Zh. Prikl. Mekh. Tekhn. Fiz.* No. 6, 76 (1967).

- V. A. MEN'SHCHIKOV and M. E. AEROV, Measurement of local gas content in a bubbling bed, *Inzh.-Fiz. Zh.* **15**(2), 228 (1968).
- L. A. NOVITSKII and N. N. ERGARDT, New devices for thermal investigations, *Teplofiz. Vysok. Temp.* **5**, 1075 (1967).
- A. I. PELEEVA and A. M. BRAZHNIKOV, Estimation methods of temperature-moisture fields in thermal equipment in the meat industry, *Izv. Vyssh. Ucheb. Zaved., Pishchev. Tekhnolog.* No. 6, 107 (1967).
- YU. A. POLYAKOV, A measurement method of thermal properties of dielectric coatings and materials with the help of a heat impulse in a shock wave tube, *Teplofiz. Vysok. Temp.* **5**, 1067 (1967).
- I. S. RADOVSKII, On acoustic method of determination of critical temperature of substances, *Teplofiz. Vysok. Temp.* **5**, 1063 (1967).
- G. N. SEMILET, A laboratory three-tube electric furnace with automatic control of temperature, *Prom. Belor.* No. 12, 26 (1967).
- G. V. SMIRNOV, Some electric radio engineering measurement methods of aerodynamic values, *Trudy LPI (Leningr. Politekh. In-t)* No. 280, 107 (1967).
- K. K. STRELOV and M. P. LAZAREV, An instrument for the determination of maximum size of capillary channels in refractory articles, *Zavodsk. Laborat.* No. 11, 1460 (1967).
- YU. M. TANANAIKO, The methods of measurement and control in the study of heat transfer to a falling liquid film, *Khim. Mashinostr.* vyp. 3, Kiev (1966).
- V. A. VERTOGRADESKII, Theoretical fundamentals of two complex methods of determination of thermal properties with inclusion of their dependence on temperature, *Teplofiz. Vysok. Temp.* **5**, 1126 (1967).

TRANSFER PROCESSES AT HIGH TEMPERATURES AND IN PLASMA

- V. A. ABRAMOV and V. I. KOGAN, On optimum parameters of an arc as the source of ionizing radiation, *Atomn. Energiya* **23**, 57 (1967).
- S. AIZENBERG, The theory of reverse arc motion. Direct transformation of thermal energy into electrical energy and fuel elements, *Inform. Byullet.* vyp. 11 (1964), 37 (1967).
- S. G. ALIKHANOV, E. L. BOYARINTSEV, V. A. KORNILOV and T. S. MEL'NIKOVA, Study of a fast impulsive discharge in hydrogen, *Teplofiz. Vysok. Temp.* **5**, 970 (1967).
- E. I. ASINOVSKII and E. P. PAKHOMOV, An experimental study of viscosity of argon plasma, *Teplofiz. Vysok. Temp.* **5**, 962 (1967).
- T. A. BARR and K. KEISON, Characteristics of a multiarc plasma generator of 8000 kW capacity—Direct transformation of heat energy into electrical energy and fuel elements, *Inform. Byulleten* vyp. 11 (1964), 52 (1967).
- L. E. BELOUSOVA, Change of radius of thermal plasma with capacity with the inclusion of walls effect, *Teplofiz. Vysok. Temp.* **5**, 1113 (1967).
- V. A. BONDAR and L. I. KISELEVSKII, Determination of temperature distribution in an axisymmetric channel of an impulsive discharge with the maximum temperature up to 10^3 °K, *Teplofiz. Vysok. Temp.* **5**, 949 (1967).
- YU. A. DUSHIN, V. A. DYUMIN and G. A. LUK'YANOV, Rate of degradation including depolymerization, *Inzh.-Fiz. Zh.* **15**, 444 (1968).
- A. B. GUGNYAK, E. B. KOROLEVA, I. D. KULAGIN, V. A. MIKHALEV, V. A. PETRUNICHEV and L. M. SOROKIN, Plasma processes of producing spherical powders of high-melting materials, *Fiz. Khim. Obrabotki Materialov* No. 4, 40 (1967).
- M. B. KHOZHATELEV and L. P. YARIN, An experimental study of the temperature pulsation effect on electric conductivity of low-temperature plasma, *Teplofiz. Vysok. Temp.* **5**, 941 (1967).
- V. S. KISEL, B. A. URYUKOV and V. I. YADROV, Correlation of voltage-current characteristics of a coaxial plasma generator with magnetic stabilization of an electric arc, *Izv. Sib. Otd. Akad. Nauk SSSR* No. 8, ser. *Tekhn. Nauk* (2), 105 (1967).
- I. I. KORNILOV, Metalloids as the new basis of refractory materials, *Metalloved. Termich. Obrab. Metallov* No. 11, 3 (1967).
- YU. L. KRASULIN, N. N. RYKALIN and M. KH. SHORSHOROV, Interaction of concentrated energy flows on materials, *Fiz. Khim. Obrab. Materialov* No. 4, 5 (1967).
- S. S. MOISEEV, The effect of temperature disturbances on plasma stability, *Zh. Prikl. Mekh. Tekhn. Fiz.* No. 6, 3 (1967).
- N. D. MORGULIS, YU. P. KORCHEVOI and V. I. LUKASHENKO, Ionization nature in discharge of a caesium plasma. The 1st part of the review paper of the All-Union Conference on Low-temperature Plasma. December 1966, *Ukr. Fiz. Zh.* **12**, 1362 (1967).
- V. I. MUSIKHIN, B. I. SERGIN, B. M. LEPINSKIKH and YU. L. PLINER, Method of investigation of the kinetics of high-temperature high rate processes, *Zavodsk. Laborat.* No. 11, 1393 (1967).
- V. A. OVCHARENKO, D. K. BURENKOV and A. A. UTKIN, Some investigations of a non-equilibrium plasma of mercury vapours with a caesium addition, *Teplofiz. Vysok. Temp.* **5**, 954 (1967).
- V. V. PANTELEEV, S. M. RAZINOVA and S. S. VASIL'EV, Study of temperature distribution of gas over the section of a discharge column in air with moderate pressures, *Zh. Fiz. Khim.* **41**, 2982 (1967).
- YU. YA. POLYAK and B. M. CHISTOSERDOV, A theory of voltamperic characteristics of one-dimensional gas discharge with transverse heat removal, *Teplofiz. Vysok. Temp.* **5**, 1111 (1967).
- M. YA. SMELYANSKII, E. K. ZHIGALKO and A. B. KUVALDIN, Experimental study of energy relations in a plasma generator with an arc stabilized by argon flow, *Teplofiz. Vysok. Temp.* **5**, 958 (1967).
- L. I. SUKSOV, On solution of an energy equation in electric arc gas heating, *Zh. Prikl. Mekh. Tekhn. Fiz.* No. 5, 79 (1967).
- N. A. TOROPOV, Study of investigations of oxides of rare-earth elements at high temperatures, *Chemistry of High-temperature Materials*, L. (1967).
- B. A. URYUKOV, Calculation of a temperature field in

- electrodes of a plasma generator, *Zh. Prikl. Mekh. Tekhn. Fiz.* No. 5, 84 (1967).
- O. I. YAS'KO, Criteria for correlation of characteristics of different electric arcs, *Inzh.-Fiz. Zh.* 15, 165 (1968).
- O. I. YAS'KO, Problems of generalization of electric arc properties, *Inzh.-Fiz. Zh.* 15, 543 (1968).
- A. I. ZHIDOVICH, Generalization of voltage-current characteristics of electric-arc heaters of unilateral outflow with charge stabilization by various gases, *Inzh.-Fiz. Zh.* 15, 153 (1968).
- A. I. ZHIDOVICH, S. K. KRAVCHENKO and O. I. YAS'KO, Heat transfer between an electric arc column and a wall of the discharge chamber of a vortex linear plasma generator, *Inzh.-Fiz. Zh.* 15, 392 (1968).
- A. I. ZHIDOVICH, S. K. KRAVCHENKO and O. I. YAS'KO, Plasma generator with bilateral outflow and electrodes of variable diameter, *Inzh.-Fiz. Zh.* 15, 203 (1968).

TRANSFER PROCESSES IN MULTICOMPONENT MEDIA

- YU. P. GUPALO and YU. S. RYAZANTSEV, On steady-state operating conditions of an adiabatic chemical flow reactor, *Zh. Prikl. Mekh. Tekhn. Fiz.* No. 5, 37 (1967).
- M. KH. KISHINEVSKII, Some results of recent theoretical work in the field of absorption complicated by chemical reaction, *Teoret. Osnovy Khim. Tekhnolog.* 1, 759 (1967).
- V. M. RAMM and I. A. GIL'DENFLAT, Absorption of gases, *Teoret. Osnovy Khim. Tekhnologii* 1, 731 (1967).

TRANSFER PROCESSES IN TECHNOLOGICAL EQUIPMENT

- YU. A. ALEKSEEV and S. G. MAZINA, Choice of control parameters of a rectification column on the basis of analysis of steady-state equations, *Izv. Vyssh. Ucheb. Zaved., Pishchev. Tekhnolog.* No. 6, 128 (1967).
- P. A. ANDRIYANOV and A. G. FEDOROV, Correlated algorithms of calculation of transient responses of heat exchangers on electronic digital computers, *Izv. Akad. Nauk SSSR, Energetika Transport* No. 6, 114 (1967).
- M. P. ANISIMOVA and E. V. STEKOL'SHCHIKOV, Energy losses in a two-phase flow due to mechanical interaction of phases, *Inzh.-Fiz. Zh.* 15, 436 (1968).
- B. V. APARIN and V. K. GRUZINOV, On a design diagram of heat transfer processes in a blast furnace, *Izv. Vyssh. Ucheb. Zaved., Chern. Metallurg.* No. 6, 38 (1967).
- YU. F. ARTAMONOV, B. M. AZIZOV and O. V. MAMINOV, An analytical determination method of the number of real plates in equipment with cocurrent interaction of phases in the contact zone, *Teoret. Osnovy Khim. Tekhnolog.* 1(6), 88 (1967).
- V. V. AVCHUKHOV, Local pressure distribution in tubes of a bundle of grid type—Calculation of heat exchangers, *Izv. Akad. Nauk Latv. SSR, ser. Fiz. Tekhn. Nauk* No. 3, 68 (1967).
- G. L. BABUKHA and A. A. SHRAIBER, An approximate estimation method of maximum heating temperature of the finest fraction of a polydispersed material in a vertical two-phase flow, *Heat Transfer and Hydrodynamics in Two-phase Media*, Kiev (1967).
- B. G. BALDIN and I. G. MARTYUSHIN, Piezometric study of the distribution of contact path in a non-uniform fluidized bed, *Teoret. Osnovy Khim. Tekhnolog* 1, 831 (1967).
- V. I. BEGACHEV, L. N. BRAGINSKII and I. S. PAVLUSHENKO, On the choice of optimum conditions of heat transfer in equipment with mixers, *Hydrodynamics and Heat-mass Transfer Processes in Chemical Equipment*, L. (1967).
- V. I. BEGACHEV, L. N. BRAGINSKII and I. S. PAVLUSHENKO, On intensity and effectiveness mixing of mobile fluids, *Hydrodynamic and Heat-mass Transfer Processes in Chemical Equipment*, L. (1967).
- V. P. BELOMYTSEV, A screw conveyer problem in the presence of heat transfer and a liquid of variable viscosity, *Zhurn. Prikl. Mekhan. Tekhn. Fiz.* No. 6, 38 (1967).
- B. R. BELOSTOTSKII, Thermal regime of continuous solid optical quantum generators, *Inzh.-Fiz. Zh.* 15, 219 (1968).
- L. M. BELYI, Z. R. GORBIS and I. K. SHUMAKOV, Study of the distribution of solid component by beta-rays in a chamber containing a gas suspension in counter-flow, *Inzh.-Fiz. Zh.* 15, 66 (1968).
- A. P. BESPAL'KO, I. F. MALEZHNIK and V. I. DEM'YANENKO, Operating conditions and pressure drop on valve turbo-grid trays, *Izv. Vyssh. Ucheb. Zaved., Pishchev. Tekhnolog.* No. 6, 119 (1967).
- N. A. BORODINA and A. V. GORYAINOVA, From the experience of industrial use of graphitic heat transfer equipment, *Trudy (Vsesoyuzn. Nauchno-issled. Konstr. In-T Khim. Mashinostr.)*, vyp. 52, 65 (1967).
- S. N. BULATOV, L. S. AKSEL'ROD, G. YA. DUKEL'SKII and K. V. KHOFFMANN, Velocity of constrained motion of particles of the dispersed phase in a system liquid-liquid, *Teoret. Osnovy Khim. Tekhnolog.* 1, 836 (1967).
- G. N. CHERMALYKH and M. E. MAKHORIN, Radiation heating of a fluidized bed, *Inzh.-Fiz. Zh.* 15, 477 (1968).
- A. I. CHERNOGOLOV, Aerodynamics of gases in an air regenerator of a standard open-hearth furnace, *Trudy In-ta Metallurg. (Urul'sk. Filial Akad. Nauk SSSR)* vyp. 13, 130 (1966).
- G. A. DREITSER and E. K. KALININ, The study of heat transfer intensification in a packed tube bundle in an air flow, *Inzh.-Fiz. Zh.* 15, 408 (1968).
- I. T. EL'PERIN, S. S. ZABRODSKII, V. S. EFREMTSEV and V. D. MIKHAILIK, On a design optimization of spouting bed equipment, *Problems of Intensification of Heat and Mass Transfer in Drying and Thermal Processes*, Minsk (1967).
- YU. P. ENYAKIN, Determination of the penetration depth of solid or liquid phase particles in counterjets of gas suspension, *Inzh.-Fiz. Zh.* 14, 995 (1968).
- G. B. FROISHTETER, G. I. SERGEEV and P. M. STUPAK, Heat and mass transfer of a two-phase flow in profiled channels, *Heat Transfer and Hydrodynamics in Two-phase Media*, Kiev (1967).
- N. I. GEL'PERIN, V. L. PEBALK and V. M. MISHEV, Pressure head and capacity of turbine mixers, *Khim. Neft. Mashinostr.* No. 12, 23 (1967).
- N. I. GEL'PERIN, V. L. PEBALK and E. P. ZAIKOVSKAYA, On some laws of dispersion of immiscible fluids in extractors with pulsating plates, *Khim. Prom.* No. 12, 918 (1967).

- A. E. GORSHTEN and I. P. MUKHLENOV, On motion of a solid material in a spouting bed, *Zh. Prikl. Khim.* **40**, 2469 (1967).
- A. N. IZMAILOVA and N. A. KOZULIN, The analysis of experimental data on operating discharge characteristics of hydrocyclones, *Hydrodynamic, Heat and Mass Transfer Processes in Chemical Equipment*, L. (1967).
- A. N. IZMAILOVA, V. V. KONSETOV and E. YA. PARAMONOV, Experimental study of hydrocyclone operation with viscous fluids, *Hydrodynamic, Heat and Mass Transfer Processes in Chemical Equipment*, L. (1967).
- V. V. KAFAROV, V. G. VYON and L. S. GORDEEV, A hydrodynamic model with a stagnation region for a packed extraction column, *Teoret. Osnovy Khim. Tekhnologii* **1**, 860 (1967).
- S. Z. KAGAN, YU. N. KOVALEV and V. I. IL'IN, Determination of mass transfer coefficients in a continuous phase for systems liquid-liquid in a flow mixer, *Zh. Prikl. Khim.* **40**, 2478 (1967).
- M. A. KAGANOV, On optimum construction of semiconductor coolers of liquid flows, *Inzh.-Fiz. Zh.* **15**, 309 (1968).
- M. A. KAGANOV and A. S. RIVKIN, Unsteady-state regime of heat exchangers with an internal heat source, *Inzh.-Fiz. Zh.* **15**, 459 (1968).
- V. A. KANISKIN, Coating of polymers with metallic dust in the field of a corona discharge, *Izv. Vyssh. Ucheb. Zaved., Energetika* No. 11, 114 (1967).
- I. I. KIRILOV, I. P. FADEEV, V. N. AMELYUSHKIN and A. L. SHUBENKO, Braking of moisture films on the edges of nozzle blades of vapour turbines, *Inzh.-Fiz. Zh.* **15**, 85 (1968).
- N. B. KONDUKOV and M. KH. SOSNA, A phase rule and classification of phase states of solid particle-gas systems, *Teoret. Osnovy Khim. Tekhnolog.* **1**, 776 (1967).
- V. V. KONSETOV, L. M. MATROSOVA and G. L. GARBUZOVA, Hydrodynamics and heat transfer of a pulsating fluidized bed of polymer powders, *Hydrodynamic and Heat and Mass Transfer Processes in Chemical Equipment*, L. (1967).
- L. B. KOTLYARSKII, Conditions for the formation of a developed interfacial surface area in immiscible liquids with the help of an acoustic hydrodynamic emitter, *Khim. Prom.* No. 12, 921 (1967).
- E. F. KURGAEV, Viscosity of heterogeneous fluid-solid particles system, *Inzh.-Fiz. Zh.* **15**, 79 (1968).
- B. A. LARIONOV and L. S. SLOBODKIN, A method of preliminary heating of adsorbents, *Problems of Intensification of Heat and Mass Transfer in Drying and Thermal Processes*, Minsk (1967).
- B. I. LEONCHIK, A. P. D'YACHEVSKII, V. P. MAYAKIN, Z. V. KOZELKINA and G. P. YAKOVLEV, On an experimental technique in the study of special cases of intercomponent heat and mass transfer in the flow of gas suspensions, *Dokl. Nauchno-Tekhn. Konfer. MEI (Mosk. Energ. In-t)*, M. (1967).
- L. A. LEONT'eva and V. YA. GAL'TSOV, On calculation of heat transfer in the boiling of solutions in tubes with forced circulation, *Teoret. Osnovy Khim. Tekhnolog.* **1**, 895 (1967).
- G. E. LOSEV, YU. V. TUMANOV, G. P. SOLOMAKHA and P. I. NIKOLAEV, The effect of the diameter of an apparatus on the power consumption in mixing of fluid by propeller mixers, *Teoret. Osnovy Khim. Tekhnolog.* **1**, 852 (1967).
- YU. E. LUKACH and V. T. MIRGORODSKII, On experimental study of energy balance of screw extruders (while processing polymeric materials) *Khim. Mashinostr.* vyp. 3, Kiev (1966).
- YU. E. LUKACH and V. T. MIRGORODSKII, On heat transfer intensity in the charging area of screw extruders (while processing polymeric materials), *Khim. Mashinostr.* vyp. 3, Kiev (1966).
- A. I. LYUBOSHITS, Determination of sizes and efficiency of regenerative multiregion air preheater, *Problems of Intensification of Heat and Mass Transfer in Drying and Thermal Processes*, Minsk (1967).
- I. L. LYUBOSHITS, Heat transfer in a regenerative heat exchanger with a falling bed, *Problems of Intensification of Heat and Mass Transfer in Drying and Thermal Processes*, Minsk (1967).
- I. L. LYUBOSHITS and S. M. REPRINTSEVA, Study of a process of low temperature treatment of milling peat for producing a filler for plastic masses of pressed powder *Problems of Intensification of Heat and Mass Transfer in Drying and Thermal Processes*, Minsk (1967).
- I. L. LYUBOSHITS, V. A. SHEIMAN, F. KH. TEMLYAK and A. S. ZELEPUGA, Sulphur extraction from sulphur raw material by using solid dispersed thermal agent, *Problems of Intensification of Heat and Mass Transfer in Drying and Thermal Processes*, Minsk (1967).
- I. L. LYUBOSHITS and E. G. TUTOVA, On heat transfer in a combined cocurrent-counterflow pneumatic plant, *Problems of Intensification of Heat and Mass Transfer in Drying and Thermal Processes*, Minsk (1967).
- K. O. MAKARENKO, On the velocity of particles in an upward flowing gas suspension, *Problems of Intensification of Heat and Mass Transfer in Drying and Thermal Processes*, Minsk (1967).
- V. E. MASLOV, V. D. LEBEDEV and S. G. USHAKOV, Effect of initial velocity of aerosol on its motion path in a curvilinear gas flow, *Inzh.-Fiz. Zh.* **15**, 450 (1968).
- V. A. MEN'SHCHIKOV and M. E. AEROV, Longitudinal mixing of a gaseous phase in bubbling reactors, *Teoret. Osnovy Khim. Tekhnolog.* **1**, 891 (1967).
- A. I. MIL'CHENKO, A. P. KELKA, N. I. TAGANOV, O. D. AFONIN, B. A. VASIL'EV and M. F. MIKHALEV, Study of shafts of high-speed mixing devices on industrial location, *Hydrodynamics and Heat and Mass Transfer Processes in Chemical Equipment*, L. (1967).
- I. P. MUKHLENOV, Catalytic processes in a fluidized bed of a catalyst, *Zh. Prikl. Khimii* **40**, 2431 (1967).
- V. V. NIKOL'SKII and N. A. KOZULIN, Study of cocurrent moisture-oil separator, *Hydrodynamic and Heat and Mass Transfer Processes in Chemical Equipment*, L. (1967).
- A. A. OIGENBLIK, V. I. MUKOSEL, L. I. KHEIFETS and I. A. BUROVOI, On investigation of the hydrodynamics of a fluidized bed by a tracer gas, *Izv. Vyssh. Ucheb. Zaved., Tsvetn. Metallurg.* No. 3, 97 (1967).
- S. M. REPRINTSEVA, On kinetic characteristics of thermal decomposition of peat during high-rate heating, *Problems of Intensification of Heat and Mass Transfer in Drying and Thermal Processes*, Minsk (1967).
- M. YA. ROZKIN, N. A. MARTYENKO, A. S. ZAKHAROV and

- M. I. BUT, Determination of heat transfer coefficients with the help of dynamic characteristics, *Inzh.-Fiz. Zh.* **15**, 159 (1968).
- V. V. SAPOZHNIKOV and N. I. SYROMYATNIKOV, Study of circulating flows of the type "gas-solid particles" as heat transfer media, *Inzh.-Fiz. Zh.* **15**, 471 (1968).
- V. A. SHEIMAN, Heat and mass transfer in a two-component (gas-solid particles) flow with a variable heat transfer coefficient, *Problems of Intensification of Heat and Mass Transfer in Drying and Thermal Processes*, Minsk (1967).
- V. A. SHEIMAN and P. S. KUTS, On heat transfer between three heat transfer media in the presence of an internal heat source, *Problems of Intensification of Heat and Mass Transfer in Drying and Thermal Processes*, Minsk (1967).
- V. A. SHEIMAN and E. G. TUTOVA, On heat transfer in multi-stage equipment with three heat transfer media *Problems of Intensification of Heat and Mass Transfer in Drying and Thermal Processes*, Minsk (1967).
- E. D. SHESTOV and L. L. POLTAVTSEVA, Calculation of dynamic characteristics of cocurrent flow and counterflow heat transfer equipment, *Trudy (Vsesoyuzn. TsNII Kompleksn. Avtomatiz.),* vyp. 16, 201 (1967).
- V. S. SINEL'SHCHIKOV, On the turbulent diffusion coefficient for particles in suspension, *Zh. Prikl. Mekh. Tekhn. Fiz.* No. 6, 47 (1967).
- L. B. SOKOLOV, T. V. KUDIN and A. I. LEBEDEV, The role of mass transfer between drops in emulsion polycondensation, *Vysok. Soedinen.* **9**, 843 (1967).
- A. SOKOLOV, V. ZHURAVLEV and V. FEDIK, Measurement of viscosity of a fluidized bed of granular product, (Transportation of products of grain grinding), *Mukomol'no-levatorn. Prom.* No. 9, 25 (1967).
- M. KH. SOSNA and N. B. KONDUKOV, Criteria and a formula for calculating fluidization rate. A polydisperse layer, *Inzh.-Fiz. Zh.* **15**, 73 (1968).
- A. M. STEPANOV and V. I. MATROZOV, Effect of scale of Venturi adsorber on the process of gas adsorption, *Teoret. Osnovy Khim. Tekhnologii* **1**, 886 (1967).
- I. N. TAGANOV, O. A. GALKIN and P. G. ROMANKOV, Study of statistical characteristics of particle motion in a polydispersed fluidized bed, *Teoret. Osnovy Khim. Tekhnologii* **1**, 825 (1967).
- A. G. TSYRLINA and K. M. GONCHARENKO, Equipment for mixing, *Hydrodynamic and Heat and Mass Transfer Processes in Chemical Equipment*, L. 91 (1967).
- I. S. TUICHIEV, N. U. RIZAEV, K. V. MERENKOV and M. M. YUSIPOV, Hydrodynamic properties of ionites in fluidization, *Izv. Vyssh. Ucheb. Zaved., Khimiya Khim. Tekhnolog.* **10**, 1177 (1967).
- E. G. TUTOVA and V. A. SHEIMAN, Air heating in a multi-stage heat transfer equipment, *Problems of Intensification of Heat and Mass Transfer in Drying and Thermal Processes*, Minsk (1967).
- G. V. UL'FSKII, Factors affecting the heating of heat transfer media in water-cooled reactors under pressure, *Inzh.-Fiz. Zh.* **15**, 35 (1968).
- YU. K. VAIL, N. KH. MANAKOV and V. V. MANSHILIN, On turbulent mixing in a three-phase fluidized bed, *Khim. Tekhnolog. Toplivo Masel* No. 12, 4 (1967).
- A. I. VASHCHENKO, A. G. ZEN'KOVSKII, V. A. DAVYDOV and N. N. LEBEDEV, Heat transfer in furnaces with heating of metal under non-oxidizing conditions, *Metalloved. Term. Obrabotka Met.* No. 11, 48 (1967).
- G. P. YASNIKOV and L. G. GALPERIN, Losses in working capacity of a gas-solid particle system due to irreversibility of interphase heat transfer, *Inzh.-Fiz. Zh.* **14**, 1001 (1968).
- S. S. ZABRODSKII, I. T. EL'PERIN, V. S. EFREMTSEV and V. K. KHOKHLOV, Large-scale spouting bed installations, *Problems of Intensification of Heat and Mass Transfer in Drying and Thermal Processes*, Minsk (1967).
- S. S. ZABRODSKII, S. A. MALYUKOVICH and A. I. TAMARIN, Study of effect of bed height on intensity of heat transfer in a fluidized bed, *Problems of Intensification of Heat and Mass Transfer in Drying and Thermal Processes*, Minsk (1967).
- S. S. ZABRODSKII and V. D. MIKHAILIK, Heat transfer of a spouting bed with a submerged heating surface, *Problems of Intensification of Heat and Mass Transfer in Drying and Thermal Processes*, Minsk (1967).
- A. M. ZAVADOVSKII and A. L. BERKOVICH, Determination of flow parameters in water injection into compressed air, *Inzh.-Fiz. Zh.* **15**, 286 (1968).
- YA. D. ZEL'VENSII, A. A. TITOV, A. A. RAITMAN and V. A. SHALYGIN, Some problems of hydrodynamics of columns with a small-size packing, *Teoret. Osnovy Khim. Tekhnologii* **1**, 846 (1967).

THERMAL PHYSICS OF BUILDING CONSTRUCTIONS

- A. I. BOIKOVA, N. A. TOROPOV, V. T. VAVILONOVA, G. N. SAMSONKINA and YU. G. SOKOLOV, Ordered and disordered structures of tricalcium silicate and its solid solutions, *Chemistry of High-temperature Materials*, L. (1967).
- YU. M. BUTT, V. V. TIMASHEV and N. S. PANIMA, Crystallization of clinker melts in a temperature range from 1900 to 1200°C, *Chemistry of High-temperature Materials*, (1967).
- N. V. SOLOMIN, The physical interpretation of the creep of oxides and silicates at high temperatures, *Chemistry of High-temperature Materials*, L. (1967).
- M. S. TRAKHTENGERTS, Optimum relationships in a plane multilayer wall with inner heat generation, *Inzh.-Fiz. Zh.* **15**, 341 (1968).

HEAT AND MASS TRANSFER AT LOW TEMPERATURES

- S. P. GORBACHEV, Heat transfer in the nozzle of a vessel for storing cryogenic fluids, *Inzh.-Fiz. Zh.* **15**, 40 (1968).
- D. V. LEBEDEV and B. M. OVSYANNIKOV, Metals and alloys in low temperature engineering, *Metalloved. Termich. Obrabotka Metallov* No. 11, 21 (1967).

HEAT AND MASS TRANSFER IN DEEP VACUUM

- A. V. BULYGA, The effect of surface curvature in the processes of transfer through a rarefied gas, *Inzh.-Fiz. Zh.* **15**, 427 (1968).

- V. I. DERGACHEV and D. P. LEBEDEV, Automatic balance for measurements in vacuum, *Inzh.-Fiz. Zh.* **15**, 346 (1968).
- A. S. GINZBURG and K. B. GISINA, The analysis of vapour migration in capillary-porous bodies during sublimation in vacuum, *Inzh.-Fiz. Zh.* **14**, 983 (1968).
- A. Z. VOLYNETS, On approximation in substituting a stationary temperature field for a real one in a sublimation process, *Inzh.-Fiz. Zh.* **15**, 162 (1968).