

References

Introduction

1. B. S. Sazhin, *Study of the Hydrodynamics of the Process of Drying of Disperse Materials in Devices with Active Hydrodynamic Conditions*, Doctoral Dissertation, Moscow, 1972.
2. B. S. Sazhin and Ye. A. Chuvpilo, *Review Information, Ser. KhM-1*, TsINTIKhim-neftemash Press, Moscow, 1975.
3. B. S. Sazhin and L. I. Gudim, *Review Information, Ser. Okhr. Okr. Sredy Rats. Isp. Prir. Res.*, Issue 1, NIITEKhIM Press, Moscow, 1982.
4. B. S. Sazhin, *Devices with Active Hydrodynamic Regimes for Drying of Dispersed Fiber-Forming Polymers*, MTI Press, Moscow, 1980.
5. B. S. Sazhin, *Suspension Bed Hydrodynamics*, MTI Press, Moscow, 1980.
6. B. S. Sazhin and T. Yu. Vekua, *Mathematical Models of Devices with Opposite Swirl Flows*, MTI Press, Moscow, 1979.
7. B. S. Sazhin and N. Ye. Shadrina, *Selection and Calculation of Drying Devices Based on Comprehensive Analysis of Wet Materials as Drying Objects*, MTI Press, Moscow, 1979.
8. B. S. Sazhin. *Inzh.-Fiz. Zh.*, Vol. 5, No. 2, pp. 19–23, 1962.
9. B. S. Sazhin et al., *Teor. Osnovy Khim. Tekhnol.*, Vol. 11, No. 4, pp. 633–636, 1977.
10. B. S. Sazhin and V. B. Sazhin, *Khim. Prom.*, No. 8, pp. 38–43, 1994.
11. B. S. Sazhin and V. B. Sazhin, USSR Author's Certificate No. 1025974, *Byull. Izobr.*, No. 24, 1983.
12. P. V. Churayev, *Dokl. Akad. Nauk SSSR*, Vol. 148, No. 6, pp. 1361–1364, 1963.

Chapter 1

1. R. Bird, W. Stewart, and E. Lightfoot, *Transport Phenomena* [Russian translation], Khimiya Press, Moscow, 1974.
2. S. Brunauer, *Gas and Vapor Adsorption*. Vol. 1. *Physical Adsorption* [Russian translation], Gosizdat Inostr. Lit. Press, Moscow, 1948.
3. O. A. Bunin, in *Collected Papers of Ivanovo Power Engineering Institute (IvPEI)*, Issue VIII, Gosenergoizdat Press, Moscow–Leningrad, 1958, pp. 144–168.
4. A. S. Ginzburg, *Theoretical and Technological Principles of Drying of Foodstuffs*, Pishchevaya Promyshlennost Press, Moscow, 1973.
5. M. M. Dubinin, in *Proc. of the First All-Union Conf. on Theoretical Problems of Adsorption "Basic Problems of the Theory of Physical Adsorption,"* Nauka Press, Moscow, 1970, pp. 251–269.
6. V. A. Kireyev, *Concise Course in Physical Chemistry*, Khimiya Press, Moscow, 1978.
7. V. S. Komarov, *Adsorbents and Their Properties*, Nauka i Tekhnika Press, Minsk, 1977.
8. V. V. Krasnikov, *Conductive Drying*, Energiya Press, Moscow, 1973.
9. V. V. Krasnikov, in *Heat and Moisture Transfer Enhancement in Drying*, Naukova Dumka Press, Kiev, 1979, pp. 14–28.
10. L. D. Landau and Ye. M. Lifshits, *Theoretical Physics*. Vol. 5. *Statistical Physics*, Pt. 1, Nauka Press, Moscow, 1976.
11. L. G. Loitsyanskiy, *Mechanics of Liquids and Gases*, Nauka Press, Moscow, 1978.
12. A. V. Luikov, *The Theory of Drying*, Energiya Press, Moscow, 1968.
13. A. L. Panasyuk, *Kinetics of Drying of Vegetables*, Candidate's Dissertation, Odessa, 1979.
14. A. N. Planovskiy and P. I. Nikolayev, *Processes and Apparatus of Chemical Industry*, Khimiya Press, Moscow, 1972.
15. P. G. Romankov, N. B. Rashkovskaya, and V. F. Frolov, *Mass Transfer Processes of Chemical Technology*, Khimiya Press, Leningrad, 1975.
16. B. S. Sazhin and Ye. A. Chuvpilo, *Review Information, Ser. Kh-MI*, TsINTIKhim-neftemash Press, Moscow, 1975.
17. B. S. Sazhin and N. Ye. Shadrina, *Selection and Calculation of Drying Devices Based on Comprehensive Analysis of Wet Materials as Drying Objects*, MTI Press, Moscow, 1979.
18. B. S. Sazhin, *Principles of Drying Technology*, Khimiya Press, Moscow, 1984.
19. V. B. Sazhin, *Development and Use of a New Method of Calculation of Industrial Processes of Drying of Loose Materials in Fluidized-Bed Devices*, Candidate's Dissertation, MKhTI Press, Moscow, 1986.
20. V. B. Sazhin et al., in *Drying Equipment for Chemical Productions*, NIIKhim mash Press, Moscow, 1987, pp. 64–72.
21. D. V. Sivukhin, *General Course in Physics*. Vol. II. *Thermodynamics and Molecular Physics*, Nauka Press, Moscow, 1979.
22. N. Ye. Shadrina, *Classification and Complex Analysis of Disperse Polymer Materials as Objects of Drying*, Candidate's Dissertation, Kalinin, 1974.
23. H. Schlichting, *Boundary Layer Theory* [Russian translation], Nauka Press, Moscow, 1974.

24. A. A. Shraiber and V. D. Glyanchenko, *Thermal Treatment of Polydisperse Materials in Two-Phase Flow*, Naukova Dumka Press, Kiev, 1976.

Chapter 2

1. C. O. Bennett and E. Mayer, *Hydrodynamics, Heat Transfer and Mass Transfer* [Russian translation], Nedra Press, Moscow, 1966.
2. S. Brunauer, *Gas and Vapor Adsorption*. Vol. 1. *Physical Adsorption* [Russian translation], Gosizdat Inostr. Lit. Press, Moscow, 1948.
3. V. S. Volkenshtein, *Rapid Method of Determining Thermophysical Characteristics of Materials*, Energiya Press, Leningrad, 1971.
4. L. G. Golubev, B. S. Sazhin, and Ye. R. Valashek, *Drying in Chemicopharmaceutical Industry*, Meditsina Press, Moscow, 1978.
5. A. A. Dolinskiy, K. D. Maletskaya, and V. V. Shmorgun, *Kinetics and Technology of Spray Drying*, Naukova Dumka Press, Kiev, 1987.
6. V. P. Dushchenko, in *Thermophysics and Heat Engineering*, Naukova Dumka Press, Kiev, 1964, pp. 313–316.
7. V. P. Dushchenko, Kh. Saidzhanov, and O. V. Allakov, in *Ext. Abstr. of Papers and Reports presented at the All-Union Conf. on Improvement of Methods of Determining Moisture Content in Various Media Using Novel Moisture-Metering Instruments*, Kiev, pp. 34–35, 1970.
8. M. F. Kazanskiy, *Dokl. Akad. Nauk SSSR*, Vol. 130, No. 5, pp. 1059–1062, 1960.
9. A. P. Karnaukhov, *Kinet. Katal.*, Vol. 8, No. 1, pp. 172–181, 1967.
10. V. B. Kvashsa, N. I. Gelperin, and A. G. Ainshtein, *Khim. Prom.*, No. 6, pp. 460–466, 1971.
11. A. V. Luikov, *The Theory of Drying*, Energiya Press, Moscow, 1968.
12. A. V. Luikov, *Heat and Mass Transfer*, Vol. IV, Nauka i Tekhnika Press, Minsk, 1966.
13. A. Ye. Pass, *Inzh.-Fiz. Zh.*, No. 10, pp. 53–57, 1963.
14. A. N. Planovskiy, V. I. Mushtayev, and V. M. Ulyanov, *Drying of Dispersed Materials in Chemical Industry*, Khimiya Press, Moscow, 1979.
15. P. A. Reh binder, in *Proc. of All-Union Scientific Technical Conf. on Intensification of Drying Processes*, Profizdat Press, Moscow, pp. 17–23, 1958.
16. B. S. Sazhin, *Study of the Hydrodynamics of the Process of Drying of Disperse Materials in Devices with Active Hydrodynamic Conditions*, Doctoral Dissertation, Moscow, 1972.
17. B. S. Sazhin, *Modern Drying Methods*, Znanie Press, Moscow, 1973.
18. B. S. Sazhin and Ye. A. Chuvpilo, *Review Information, Ser. KhM-1*, TsINTIKhim-neftemash Press, Moscow, 1975.
19. B. S. Sazhin and N. Ye. Shadrina, *Selection and Calculation of Drying Devices Based on Comprehensive Analysis of Wet Materials as Drying Objects*, MTI Press, Moscow, 1979.
20. B. S. Sazhin, N. Ye. Shadrina, and V. A. Yatsunova, in *Heat and Mass Transfer*, Vol. 10, Pt. II, AN BSSR Press, Minsk, 1974, pp. 128–132.
21. B. S. Sazhin, *Principles of Drying Technology*, Khimiya Press, Moscow, 1984.

22. V. B. Sazhin et al., in *Use of Cybernetic Methods for Solving Applied Problems of Chemical Technology*, VINITI Press, Moscow, 1986, pp. 2–25.
23. V. B. Sazhin and I. M. Seldin, in *Physicochemical Problems of Chemical Productions*, Collected Papers of Moscow Chemical Engineering Institute, MKhTI Press, Moscow, 1990, pp. 126–131.
24. D. P. Timofeyev, *Adsorption Kinetics*, AN SSSR Press, Moscow, 1962.
25. A. F. Chudnovskiy, *Thermophysical Characteristics of Dispersed Materials*, Fizmatgiz Press, Moscow, 1962.
26. N. Ye. Shadrina, *Classification and Complex Analysis of Disperse Polymer Materials as Objects of Drying*, Candidate's Dissertation, Kalinin, 1974.
27. A. V. Kiselev and V. P. Dreving (Eds.), *Experimental Methods in Adsorption and Molecular Chromatography*, MGU Press, Moscow, 1973.
28. S. Crabowski and H. S. Ramaswany, in *Proc. of the 10th Int. Drying Symp. "Drying 96" (IDS'96)*, Krakow, Poland, 30 July–2 August 1996, Vol. B, pp. 785–792.

Chapter 3

1. M. E. Aerov and O. M. Todes, *Hydraulic and Thermal Principles of Operation of Devices with Stationary and Boiling Granular Beds*, Khimiya Press, Moscow, 1986.
2. N. I. Gelperin, V. G. Ainshtein, and V. B. Kvasha, *Principles of Fluidization Technology*, Khimiya Press, Moscow, 1967.
3. A. G. Kasatkin, *Basic Processes and Apparatus of Chemical Technology*, Khimiya Press, Moscow, 1971.
4. V. V. Kafarov, *Cybernetic Methods in Chemistry and Chemical Technology*, Khimiya Press, Moscow, 1976.
5. G. A. Korn and T. M. Korn, *Mathematical Handbook for Scientists and Engineers. Definitions, Theorems, and Formulas* [Russian translation], Nauka Press, Moscow, 1977.
6. B. P. Lukashevskiy, *Development of the Mathematical Model of the Device with Opposing Twisted Flows*, Candidate's Dissertation, Moscow, 1978.
7. A. A. Oigenblik, V. B. Sazhin, and T. A. Solovyova, in *Processes in Granular Media*, Interuniversity Collection of Scientific Papers, Ivanovo, 1989, pp. 58–62.
8. J. F. Davison and D. Harrison (Eds.), *Fluidization* [Russian translation], Khimiya Press, Moscow, 1974.
9. P. G. Romankov and N. B. Rashkovskaya, *Suspension Drying*, Khimiya Press, Leningrad, 1979.
10. B. S. Sazhin, *Hydrodynamics of Suspension Bed*, MTI Press, Moscow, 1978.
11. B. S. Sazhin et al., *Theor. Osnovy Khim. Tekhnol.*, Vol. 11, No. 4, pp. 633–636, 1977.
12. B. S. Sazhin et al., in *Ext. Abstr. of Papers presented at the 9th All-Union Scientific Technical Conf. on Energy Technological Cyclone Combined and Complex Processes*, MEI Press, Moscow, 1976, pp. 62–64.
13. B. S. Sazhin, *Principles of Drying Technology*, Khimiya Press, Moscow, 1984.
14. V. B. Sazhin et al., in *Inform. Bull. on Chemical. Industry*, No. 4 (121), NIITEKhim Press, 1988, pp. 36–45.

15. V. B. Sazhin, A. A. Oigenblik, B. A. Koryagin, and I. V. Solovyova, in *Studies on Chemistry and Chemical Technology of Mineral Fertilizers and Starting Materials for Their Production*, Collected Papers of Moscow Chemical Engineering Institute, MKhTI Press, Moscow, 1990, pp. 46–50.
16. W. Pogorski, *Kopalnict — clud*, No. 2, pp. 1–11, 1975.
17. K. R. Schmidt, *Staub*, Vol. 23, No. 11, pp. 491–501, 1963.
18. M. Stacic, J. Vodnik, and V. Turanjanin, in *Proc. of the 10th Int. Drying Symp. "Drying 96" (IDS'96)*, Krakow, Poland, 30 July–2 August 1996, Vol. B, pp. 1085–1092.

Chapter 4

1. C. O. Bennett and E. Mayer, *Hydrodynamics, Heat Transfer and Mass Transfer* [Russian translation], Nedra Press, Moscow, 1966.
2. R. Bird, W. Stewart, and E. Lightfoot, *Transfer Phenomena* [Russian translation], Khimiya Press, Moscow, 1974.
3. N. I. Gamayunov and L. I. Ilchenko, *Khim. Prom.*, No. 6, pp. 344–348, 1979.
4. N. I. Gelperin, V. G. Ainshtein, and V. B. Kvasha, *Principles of Fluidization Technology*, Khimiya Press, Moscow, 1967.
5. A. S. Ginzburg, *Theoretical and Technological Principles of Drying of Foodstuffs*, Pishchevaya Promyshlennost Press, Moscow, 1973.
6. A. A. Gukhman, *Application of Similarity Theory to Study of Heat and Mass Transfer Processes*, Vysshaya Shkola Press, Moscow, 1974.
7. A. A. Gukhman, *Introduction to the Similarity Theory*, Vysshaya Shkola Press, Moscow, 1973.
8. H. S. Carslaw and D. Jaeger, *Conduction of Heat in Solids* [Russian translation], Nauka Press, Moscow, 1964.
9. V. V. Kafarov, *Cybernetic Methods in Chemistry and Chemical Technology*, Khimiya Press, Moscow, 1976.
10. V. B. Kvasha, N. I. Gelperin, and V. G. Ainshtein, *Khim. Prom.*, No. 6, pp. 460–466, 1971.
11. G. A. Korn and T. M. Korn, *Mathematical Handbook for Scientists and Engineers. Definitions, Theorems, and Formulas* [Russian translation], Nauka Press, Moscow, 1977.
12. M. L. Krasnov, A. I. Kiselyov, and G. I. Makarenko, *Vector Analysis*, Nauka Press, Moscow, 1978.
13. P. S. Kuts, Doctoral Dissertation, Kiev, 1979.
14. P. D. Lebedev, *Calculation and Design of Drying Devices*, Gosenergoizdat Press, Moscow, 1963.
15. L. G. Loitsyanskiy, *Mechanics of Liquids and Gases*, Nauka Press, Moscow, 1978.
16. A. V. Luikov, *The Theory of Drying*, Energiya Press, Moscow, 1968.
17. A. V. Luikov, *Heat Conduction Theory*, Vysshaya Shkola Press, Moscow, 1967.
18. A. V. Neimark and L. I. Kheifits, *Khim. Prom.*, No. 6, pp. 348–351, 1979.
19. B. S. Sazhin, *Modern Drying Methods*, Znanie Press, Moscow, 1973.

20. B. S. Sazhin and Ye. A. Chuvpilo, *Review Information, Ser. KhM-1*, TsINTIKhim-neftemash Press, Moscow, 1975.
21. B. S. Sazhin, V. A. Reutskiy, and L. S. Smirnova, in *Proc. of the Scientific Technical Conf. on Drying Intensification and Use of Novel Facilities*, AN Ukr.SSR Press, Kiev, 1978, pp. 40–45.
22. B. S. Sazhin, *Principles of Drying Technology*, Khimiya Press, Moscow, 1984.
23. V. B. Sazhin, *Development and Use of a New Method of Calculation of Industrial Processes of Drying of Loose Materials in Fluidized-Bed Devices*, Author's Abstract of Candidate's Dissertation, MKhTI Press, Moscow, 1986.
24. V. B. Sazhin, I. M. Seldin, and A. A. Oigenblik, in *Proc. of the Interrepublican Scientific Technical Conf. "Intensification of Processes in Chemical and Food Manufacturing Technology,"* Tashkent, 1993, Pt. 2, p. 337.
25. V. B. Sazhin et al., in *Proc. of the 10th Int. Conf. of Young Scientists on Chemistry and Chemical Technology*, RITs RKhTU Press, Moscow, 1996, Pt. 2, pp. 307–308.
26. A. N. Tikhonov and A. A. Samarskiy, *Equations of Mathematical Physics*, Nauka Press, Moscow, 1972.
27. D. Hudson, *Statistics for Physicists* [Russian translation], Mir Press, Moscow, 1967.
28. H. Schlichting, *Boundary Layer Theory* [Russian translation], Nauka Press, Moscow, 1974.
29. E. Janke, F. Emde, and F. Lesh, *Special Functions* [Russian translation], Nauka Press, Moscow, 1977.
30. T. R. Gallomay and B. H. Sage, *Int. J. Heat Mass Transfer*, No. 7, p. 283, 1964.
31. T. R. Gallomay and B. H. Sage, *Int. J. Heat Mass Transfer*, No. 11, p. 539, 1968.
32. A. Glawen and W. Gauvin, *J. Chem. Eng.*, Vol. 46, 223, 1968.
33. Rohit M. Shah and Prem K. Arora, in *Proc. of the 10th Int. Drying Symp. "Drying 96" (IDS'96)*, Krakow, Poland, 30 July–2 August 1996, Vol. B, pp. 1351–1360.

Chapter 5

1. E. D. Akim and L. P. Perepechkin, *Cellulose for Acetylation and Cellulose Acetates*, Lesnaya Promyshlennost Press, Moscow, 1971.
2. R. Z. Alimov, *Inzh.-Fiz. Zh.*, Vol. 10, No. 4, pp. 437–445, 1966.
3. V. I. Areshchenko, N. A. Bukhman, and V. O. Krol, in *Theory and Practice of Cyclone Technological Processes in Metallurgy and Other Industries*, Dnepropetrovsk, 1982, p. 83.
4. N. M. Belyayev and A. A. Ryadno, *Methods of Heat Conduction Theory*. Pt. 2, Vysshaya Shkola Press, Moscow, 1982.
5. L. G. Golubev, B. S. Sazhin, and Ye. R. Valashek, *Drying in Chemicopharmaceutical Industry*, Meditsina Press, Moscow, 1972.
6. M. M. Dubinin, in *Natural Sorbents*, Nauka Press, Moscow, 1967, pp. 8–24.
7. V. V. Krasnikov, *Conductive Drying*, Energiya Press, Moscow, 1973.
8. D. N. Mukhiddinov, D. A. Mirakhmedova, and B. S. Sazhin, *Mathematical Modeling in CADs of Drying Devices for Cotton Wool and Its Derivatives*, FAN Press, Tashkent, 1990.

9. S. P. Papkov and E. E. Fainberg, *Interactions of Cellulose and Cellulose Materials with Water*, Khimiya Press, Moscow, 1976.
10. A. N. Planovskiy and P. I. Nikolayev, *Processes and Devices in Chemical Industry*, Khimiya Press, Moscow, 1972.
11. B. S. Sazhin, *Principles of Drying Technology*, Khimiya Press, Moscow, 1984.
12. B. S. Sazhin, V. A. Reutskiy, A. Sh. Shaislamov, et al., *Study of Drying Kinetics for Fiber-Forming Cellulose Diacetate Polymer in Spouted-Bed Devices with Additional Introduction of Drying Agent*, MTI Press, Moscow, 1984. Deposited in TsNIITEPlegprom, 1984, No. 950 LP-DVCh, No. 7 (153), p. 91.
13. V. B. Sazhin et al., in *Proc. of the 9th Int. Conf. of Young Scientists on Chemistry and Chemical Technology*, PAN Press, Moscow, 1995, Pt. 2, p. 202.
14. V. B. Sazhin, N. V. Menshutina, E. M. Koltsova, and I. N. Dorokhov, in *Studies on Chemistry and Chemical Technology of Mineral Fertilizers and Starting Materials for Their Production*, Collected Papers of Moscow Chemical Engineering Institute, MKhTI Press, Moscow, 1990, pp. 84–88.
15. V. B. Sazhin et al., in *Development of Theory and Design of the Processes of Fine Grinding, Classification, Drying and Mixing of Materials*, Interuniversity Collection of Scientific Papers, Ivanovo, 1988, pp. 110–114.
16. I. V. Solovyova, A. A. Oigenblik, and V. B. Sazhin, in *Proc. of the Moscow City Conf. on Chemistry and Chemical Technology*, VINITI (No. 8431-V-88), Moscow, 1988, pp. 170–177.
17. C. J. Efremov and B. S. Sazin, *Technika Suseni. 1 DIL. Spolecnost pro technika prostedri*, 1996, pp. 3–7.
18. C. M. Vanst Lang, Selection of industrial driers, *Chem. Eng.*, Vol. 91, No. 5, pp. 38–45, 1984.

Chapter 6

1. M. N. Belgorodskiy, *Complex Analysis and Kinetics of Drying of Pharmaceutical Materials*, Candidate's Dissertation, Kazan, 1971.
2. L. G. Golubev, B. S. Sazhin, and Ye. R. Valashek, *Drying in Chemicopharmaceutical Industry*, Meditsina Press, Moscow, 1978.
3. L. I. Zhuravlyov et al., in *Abstr. of Papers presented at the All-Union Scientific Technical Conf. "Drying of Polymeric Materials and Development of New Structures of Drying Equipment," Dzerzhinsk, 25–27 January 1973*, pp. 37–39.
4. V. V. Kafarov, *Cybernetic Methods in Chemistry and Chemical Technology*, Khimiya Press, Moscow, 1976.
5. A. V. Luikov, *The Theory of Drying*, Energiya Press, Moscow, 1968.
6. M. A. Mikheyev and I. M. Mikheyeva, *Principles of Heat Transfer*, Energiya Press, Moscow–Leningrad, 1977.
7. V. P. Osinskiy, *Drying of Disperse Materials in a Vibrating Fluidized Bed*, Candidate's Dissertation, Kalinin, 1971.
8. A. Ye. Pass, *Inzh.-Fiz. Zh.*, No. 10, pp. 53–57, 1963.
9. B. S. Sazhin and Ye. A. Chuvpilo, *Review Information, Ser. KhM-1*, TsINTIKhim-neftemash Press, Moscow, 1975.

10. B. S. Sazhin, N. Ye. Shadrina, and V. A. Yatsunova, in *Heat and Mass Transfer*, Vol. 10, Pt. II, AN BSSR Press, Minsk, 1974, pp. 127–132.
11. B. S. Sazhin, *Principles of Drying Technology*, Khimiya Press, Moscow, 1984.
12. B. S. Sazhin and V. B. Sazhin, *Khim. Prom.*, No. 8, pp. 38–43, 1994.
13. V. B. Sazhin et al., *Khim. Prom.*, No. 8, pp. 35–41, 1989.
14. V. B. Sazhin et al., in *Proc. of the 10th Int. Conf. of Young Scientists on Chemistry and Chemical Technology*, RITs RkhTU Press, Moscow, 1996, Pt. 2, pp. 309–310.
15. V. I. Chichetkin, *Intensification of the Processes of Drying of Disperse Polymers*, Candidate's Dissertation, 1971.
16. P. V. Churayev, *Dokl. Akad. Nauk SSSR*, Vol. 148, No. 6, pp. 1361–1364, 1963.
17. K. Bernasek, *Technika suseni. I DIL. Spolecnost pro techniku prostredi*, 1996, pp. 23–34.

Chapter 7

1. B. S. Sazhin and V. B. Sazhin, Inventor's Certificate No. 1025974, *Byull. Izobr.* No. 24, 1983.
2. F. I. Banit and A. D. Malgin, *Dust Collecting and Gas Cleaning in the Industry of Constructional Materials*, Stroiizdat Press, Moscow, 1979.
3. A. M. Belevitskiy, *Economics and Technicoeconomic Optimization of Dust Collecting Devices*, LenGiprozoochistka Press, Leningrad, 1982.
4. A. S. Belousov, in *Ext. Abstr. of Papers presented at the Scientific Conf. of the Moscow Technological Institute "Current Problems of the Development of Textile Industry and Tasks of Training of Engineers,"* MTI Press, Moscow, 1982, p. 122.
5. A. S. Belousov, in *Ext. Abstr. of Papers presented at the Second All-Union Conference–Seminar of Young Scientists "Cybernetic Methods in Chemistry and Chemical Technology,"* Grozny, 1984, p. 48.
6. A. S. Belousov, *Structure of Opposing Vortex Flows and Calculation of Centrifugal Separation of Gas Suspensions*, Candidate's Dissertation, MTI Press, Moscow, 1986.
7. M. I. Birger, *Handbook on Dust and Ash Collecting* [Russian translation], Energoatomizdat Press, Moscow, 1983.
8. N. A. Bobrovnikov, *Dust Protection of Air at the Plants of Construction Industry*, Stroiizdat Press, Moscow, 1981.
9. A. Yu. Valdberg and N. S. Kirsanova, *Khim. Neft. Mashinostr.*, No. 4, p. 35, 1985.
10. A. Yu. Valdberg, M. M. Zaitsev, V. Yu. Padva, et al., *Khim. Neft. Mashinostr.*, No. 6, pp. 3–5, 1964.
11. A. Yu. Valdberg, M. M. Zaitsev, V. Yu. Padva, et al., *Khim. Neft. Mashinostr.*, No. 3, pp. 7–8, 1968.
12. T. Yu. Vekua, *Study of Hydrodynamics of Multifunctional Devices with Opposing Vortex Flows*, Author's Abstract of Candidate's Dissertation (Eng.), MTI Press, Moscow, 1979.
13. I. L. Gudim and V. B. Sazhin, in *Ext. Abstr. of Papers presented at the 9th Int. Conf. of Young Scientists on Chemistry and Chemical Technology*, PAN Press, Moscow, 1995, Pt. 2, pp. 207–208.

14. L. I. Gudim, B. S. Sazhin, and Yu. N. Makov, *Khim. Prom.*, No. 4, pp. 40–42, 1987.
15. L. I. Gudim, T. Yu. Zhuravlyova, and V. V. Markov, *Izv. Vyssh. Uchebn. Zaved., Tekhnol. Tekstil. Prom.*, No. 1, pp. 117–119, 1985.
16. G. M. Gordon and I. L. Peisakhov, *Control of Dust-Collecting Devices*, Metallurgiya Press, Moscow, 1973.
17. V. D. Goryachev, *Izv. Vyssh. Uchebn. Zaved., Energetika*, No. 2, pp. 49–55, 1980.
18. V. D. Goryachev, V. V. Chernyshev, and G. P. Kornev, *Izv. Vyssh. Uchebn. Zaved., Energetika*, No. 3, pp. 67–72, 1984.
19. V. S. Guryev and V. A. Uspenskiy, *Prom. San. Ochist. Gazov*, No. 4, pp. 9–11, TsINTIKhimneftemash Press, Moscow, 1975.
20. V. S. Guryev and V. A. Uspenskiy, *Prom. San. Ochist. Gazov*, No. 4, pp. 12–14, TsINTIKhimneftemash Press, Moscow, 1975.
21. N. V. Danilenko, *Separation of Dust-Gas Mixtures in Vortex-Type Devices*, Candidate's Dissertation, MIKhM Press, Moscow, 1988.
22. *Testing of Dust-Removing Ventilation Devices*, LIOT VTsSPS Press, Leningrad, 1971, p. 163.
23. D. T. Karpukhovich, *High-Performance Cyclone STsN-40*, Information Bulletin, Yaroslavl Territorial Center of Scientific Technical Publications, 1985.
24. P. A. Kouzov, *Scientific Works of the Institute of Labor Protection*, Issue 80, VTsSPS Press, Moscow, 1972.
25. P. A. Kouzov and G. A. Iofinov, *Single Procedure of Comparative Testing of Dust Collectors for Cleaning Ventilation Air*, LIOT VTsSPS Press, Leningrad, 1967, p. 103.
26. P. A. Kouzov and L. Ya. Skryabina, *Methods of Determining Physicochemical Properties of Industrial Dusts and Ground Materials*, Khimiya Press, Leningrad, 1983.
27. P. A. Kouzov, *Principles of Analysis of Disperse Composition of Industrial Dusts and Ground Materials*, Khimiya Press, Leningrad, 1987.
28. P. A. Kouzov, in *Comparative Assessment of Cyclones of Various Types. Dust Removal in Metallurgy*, Metallurgiya Press, Moscow, 1971, pp. 185–196.
29. P. A. Kouzov, A. D. Malgin, and G. M. Skryabin, *Gas and Air Cleaning from Dust in Chemical Industry*, Khimiya Press, Leningrad, 1982.
30. Yu. V. Krechin, V. I. Solovyov, and A. N. Zhilinskiy, *Nauch. Tr. VNIPIchermetenergoochistka*, Issues 11–12, pp. 36–38, Metallurgiya Press, Moscow, 1969.
31. Yu. V. Krechin et al., *Prom. San. Ochist. Gazov*, No. 1, pp. 24–25, TsINTIKhimneftemash Press, Moscow, 1976.
32. V. N. Ladyzhskiy, *Study of Hydrodynamics and Development of Efficient Collecting System in Devices with Opposing Vortex Flows with Reference to Fiber-Forming Polymers*, Author's Abstract of Candidate's Dissertation (Eng.), MTI Press, Moscow, 1979.
33. *Procedure of Determining Disperse Composition of Industrial Dusts in Gas Cleaning Processes*, RTM Minkhimmash, RDRTM-14-20-79, Moscow, 1979.
34. R. Kh. Mukhutdinov, V. K. Maslov, and P. I. Kornilayev, *Prom. San. Ochist. Gazov*, No. 3, pp. 9–10, TsINTIKhimneftemash Press, Moscow, 1980.

35. *Equipment, Maintenance, Accident Prevention and Labor Organization in Cleaning Workshops of Cotton Fabrics*, Review Information, UzNIINTI Press, 1981.
36. V. Yu. Padva, *Vodosnab. San. Tekh.*, No. 4, pp. 6–10, 1968.
37. FRG Patent No. 1092282, 1953.
38. FRG Patent No. 1208163, 1953.
39. I. A. Popov, *Study of Hydrodynamics in OVF Devices Designed for Drying of Fiber-Forming Materials*, Author's Abstract of Candidate's Dissertation (Eng.), MTI Press, Moscow, 1979.
40. A. I. Pirumov, *Dust Removal from Air*, Stroiizdat Press, Moscow, 1981.
41. O. N. Rusak and V. V. Milokhov, *Dust Control at Woodworking Plants*, Lesnaya Promyshlennost Press, Moscow, 1975.
42. B. S. Sazhin and L. I. Gudim, *Dust Collectors with Opposing Vortex Flows*, Review Information, NIITEKhim Press, Moscow, 1982, Issue 1.
43. B. S. Sazhin, Ye. A. Chuvpilo, and I. F. Fokin, *Intensification of Technological Processes and Improvement of Equipment*, Sumy Branch of Kharkov Polytechnic Institute Press, 1973.
44. B. S. Sazhin, Ye. A. Chuvpilo, and B. P. Lukachevskiy, in *Drying of Polymeric Materials and Development of New Structures of Drying Equipment*, TsINTIkhimneftemash Press, Moscow, 1973, pp. 8–11.
45. B. S. Sazhin et al., in *Proc. of the 8th All-Union Scientific Technical Conf. on Energy Technological Cyclone Combined and Complex Processes*, MEI Press, Moscow, 1974, pp. 59–62.
46. B. S. Sazhin and Ye. A. Chuvpilo, *Standard Driers with Material Suspension Bed*, TsINTIkhimneftemash Press, Moscow, 1975.
47. B. S. Sazhin, L. I. Gudim, V. N. Ladyzhskiy, and A. M. Grabskiy, in *Proc. of the 10th All-Union Scientific Technical Conf. on Energy Technological Processes*, MEI Press, Moscow, 1978, p. 89.
48. B. S. Sazhin, B. P. Lukachevskiy, I. F. Fokin, et al., in *Proc. of the 9th All-Union Scientific Technical Conf. on Energy Technological Cyclone Combined and Complex Processes*, MEI Press, Moscow, 1976, pp. 62–63.
49. B. S. Sazhin, L. I. Gudim, G. I. Efremov, and V. A. Reutskiy, *Study, Development, and Introduction of Multifunctional Devices with Opposing Vortex Flows. Current Problems of Development of Textile, Light and Chemical Industry and of Textile Machine Construction, and Problems of Training of Engineers*, Interuniversity Collected Papers, MTI Press, Moscow, 1979, pp. 203–210.
50. B. S. Sazhin, L. I. Gudim, and M. V. Suvorov, *Izv. Vyssh. Uchebn. Zaved., Tekhnol. Tekstil. Prom.*, No. 6, pp. 66–68, 1984.
51. B. S. Sazhin, L. I. Gudim, D. I. Kikalishvili, et al., *Izv. Vyssh. Uchebn. Zaved., Tekhnol. Tekstil. Prom.*, No. 1, pp. 78–90, 1986.
52. B. S. Sazhin, L. I. Gudim, V. N. Galich, et al., *Khim. Prom.*, No. 10, pp. 626–627, 1984.
53. B. S. Sazhin and L. I. Gudim, *Vortex Dust Collectors*, Khimiya Press, Moscow, 1995.
54. V. B. Sazhin and I. N. Dorokhov, in *Improvement of Efficiency of Technological Processes and Equipment in Textile Industry and Development of Dust Collecting Systems*, Interuniversity Collected Papers, MTI Press, Moscow, 1988, pp. 130–132.

55. V. T. Samsonov, *Nauch. Rab. IOT VTsSPS*, Issue 5, No. 37, pp. 21–30, VTsNIOT VTsSPS Press, Moscow, 1965.
56. B. S. Sazhin, B. P. Lukachevskiy, M. Sh. Dzhunisbekov, et al., *Teor. Osnovy Khim. Tekhnol.*, Vol. 19, No. 5, pp. 687–690, 1985.
57. Ye. Yu. Serov and A. G. Chumakov, in *Collected Papers of the Institute of Thermophysics*, Novosibirsk, 1989, pp. 229–233.
58. Ye. Yu. Serov, *Improvement of Systems of Dust Removal from Air in Production of Flax Fiber*, Candidate's Dissertation, MTI Press, Moscow, 1988.
59. S. Straus, *Industrial Gas Cleaning*, Khimiya Press, Moscow, 1981.
60. V. N. Uzhov, A. Yu. Valdberg, B. I. Myagkov, and I. K. Reshidov, *Cleaning of Industrial Gases from Dust*, Khimiya Press, Moscow, 1981.
61. V. A. Uspenskiy and V. I. Solovyov, *Inzh.-Fiz. Zh.*, Vol. 18, No. 3, pp. 459–466, 1970.
62. V. A. Uspenskiy, V. I. Solovyov, and V. S. Guriev, *Inzh.-Fiz. Zh.*, Vol. 20, No. 6, pp. 1078–1081, 1971.
63. V. A. Uspenskiy and V. M. Kiselyov, *Teor. Osnovy Khim. Tekhnol.*, Vol. 8, No. 3, pp. 428–434, 1974.
64. V. A. Uspenskiy, V. S. Guriev, and V. A. Uvarov, *Prom. San. Ochist. Gazov*, No. 6, pp. 9–10, TsINTIkhimneftemash Press, Moscow, 1978.
65. V. A. Uspenskiy, V. A. Uvarov, and S. G. Veselman, *Prom. San. Ochist. Gazov*, No. 2, pp. 11–13, TsINTIkhimneftemash Press, Moscow, 1979.
66. V. A. Filippov, *Cleaning of Industrial Gases at Coal Benefication and Briquet Factories*, Nedra Press, Moscow, 1982.
67. Ye. V. Frolov and Ye. S. Shitikov, *Toward the Problem of Hydraulic Resistance of Vortex Dust Collectors*, *Ibid*, pp. 49–52.
68. Ye. V. Frolov, E. F. Shurgalskiy, and Ye. S. Shitikov, *Prom. San. Ochist. Gazov*, No. 6, pp. 10–11, TsINTIkhimneftemash Press, Moscow, 1984.
69. Ye. V. Frolov, E. F. Shurgalskiy, I. Kh. Yenikeev, and Ye. S. Shitikov, in *Modern Machines and Devices of Chemical Productions*, Tashkent, 1983, pp. 25–33.
70. *Cyclones of Scientific Research Institute of Gas Cleaning, Instructions for Design, Manufacture, Assembly and Operation*, Yaroslavl, 1971.
71. Ye. A. Shtokman, *Air Cleaning from Dust at Factories of Food Industry*, Pishchepromizdat Press, Moscow, 1977.
72. E. F. Shurgalskiy, in *Ext. Abstr. of Papers presented at the All-Union Scientific Conf. "Increase of Efficiency and Improvement of Processes and Devices of Chemical Productions,"* Kharkov, 1985, pp. 8–9.
73. E. F. Shurgalskiy, *Teor. Osnovy Khim. Tekhnol.*, Vol. 13, No. 3, pp. 360–366, 1985.
74. E. F. Shurgalskiy, in *Calculation, Design and Study of Machines, Devices and Plants of Chemical Productions*, MIKhM Press, Moscow, 1982, pp. 53–57.
75. V. Yankov and I. Dichev, *Tekhnicheska Mysl* [in Bulgarian], Vol. 8, No. 1, pp. 95–102, 1971.
76. S. S. Yankovskiy and N. G. Bulgakova, *Prom. San. Ochist. Gazov*, No. 3, p. 14, TsINTIkhimneftemash Press, Moscow, 1982.
77. S. S. Yankovskiy and N. G. Bulgakova, *Prom. San. Ochist. Gazov*, No. 4, pp. 9–10, TsINTIkhimneftemash Press, Moscow, 1981.

78. K. Budinsky, *Vyvoj protiproudeho viroveho odlncovace*, Yyzkumna zprava VUV, Praha, 1971.
79. K. Budinsky, *Die Bewegung der festen Teilchen im Drehstromungsentstauber. Staub Reinhaltung der Luft*, Vol. 32, No. 3, pp. 87–91, 1972.
80. K. Budinsky, *Vyvoj protiproudeho viroveho odlncovace*, Yyzkumna zprava VUV, Praha, 1972.
81. D. Ciliberti and B. Lancaster, *Chem. Eng. Sci.*, Vol. 31, No. 8, pp. 499–503, 1976.
82. D. Ciliberti and B. Lancaster, *J. Chem. Eng.*, Vol. 22, No. 2, pp. 394–398, 1976.
83. D. Ciliberti and B. Lancaster, *Chem. Eng. Sci.*, Vol. 22, No. 6, pp. 1150–1152, 1976.
84. *Chem Proc. (USA)*, Vol. 32, No. 5, p. 77, 1969.
85. H. Klein, *Staub*, Vol. 23, No. 11, pp. 501–609, 1963.
86. H. Klein, *C. Z. Chemie Technik*, Vol. 1, No. 5, pp. 230–234, 1972.
87. H. Klein and P. Schmidt, *Verfahrenstechnik*, Vol. 5, No. 8, pp. 316–319, 1971.
88. W. Podgorski, *Budownictwo gorniczo-przemyslowe i kopalnictwo*, No. 2, pp. 1–11, 1975.
89. E. Schauffler, K. H. Oehlich, and K. Schmidt, *Staub*, Vol. 23, No. 4, pp. 228–230, 1968.
90. K. R. Schmidt, *Staub*, Vol. 23, No. 11, pp. 491–501, 1963.

Chapter 8

1. S. A. Bogatykh, *Cyclone-Froth Devices*, Mashinostroenie Press, Leningrad, 1978.
2. S. Brunauer, *Gas and Vapor Adsorption*. Vol. 1. *Physical Adsorption* [Russian translation], Gosizdat Inostr. Lit. Press, Moscow, 1948.
3. A. V. Luikov, *Drying in Chemical Industry*, Khimiya Press, Moscow, 1970.
4. A. V. Luikov and B. I. Leonchik, *Spray Driers*, Mashinostroenie Press, Moscow, 1966.
5. A. N. Planovskiy, V. I. Mushtayev, and V. M. Ulyanov, *Drying of Dispersed Materials in Chemical Industry*, Khimiya Press, Moscow, 1979.
6. P. G. Romankov and N. B. Rashkovskaya, *Suspension Drying*, Khimiya Press, Leningrad, 1979.
7. Guiding Technical Material RTM 26-01-13-67, *Use of Band and Roller-Band Driers*, NIIKhim mash Press, Moscow, 1968.
8. B. S. Sazhin, *Principles of Drying Technology*, Khimiya Press, Moscow, 1984.
9. V. B. Sazhin, A. A. Oigenblik, I. N. Dorokhov, and V. V. Kafarov, *Prom. Teplotekh.*, Vol. 7, No. 6, pp. 40–46, 1985.
10. V. B. Sazhin et al., in *Proc. of the 9th Int. Conf. of Young Scientists on Chemistry and Chemical Technology*, PAN Press, Moscow, 1995. Pt. 2, p. 205.
11. S. V. Sorokin and V. B. Sazhin, in *Devices with Static and Boiling Beds in Chlorine Industry*, Collected Papers of GosNIIKhlorproekt, NIITEKhim Press, Moscow, 1988, pp. 106–111.
12. *Heat Engineering Handbook*, Vol. 1, Energiya Press, Moscow, 1975.
13. *Heat Engineering Handbook*, Vol. 1, Energiya Press, Moscow, 1976.

14. A. P. Fokin et al., Heat and Mass Transfer Spray Devices for Producing Chemical Reagents and Highly Pure Substances, *Review Information, Ser. Reagents and Especially Pure Substances*, NIITEKhim Press, Moscow, 1984.

Chapter 9

1. A. M. Belevitskiy, *Economics and Technicoeconomic Optimization of Dust Collecting Devices*, LenGiprozoochistka Press, Leningrad, 1982.
2. M. I. Birger, *Handbook on Dust and Ash Collecting* [Russian translation], Energoatomizdat Press, Moscow, 1983.
3. P. A. Kouzov and G. A. Iofinov, *Single Procedure of Comparative Testing of Dust Collectors for Cleaning of Ventilation Air*, LIOT VTsSPS Press, Leningrad, 1967.
4. Yu. V. Krechin, V. I. Solovyov, and A. N. Zhilinskiy, *Nauch. Tr. VNIPIchermetenergoochistka*, Issues 11–12, pp. 36–38, Metallurgiya Press, Moscow, 1969.
5. B. S. Sazhin, L. I. Gudim, V. N. Galich, et al., *Khim. Prom.*, No. 10, pp. 626–627, 1984.
6. B. S. Sazhin, *Principles of Drying Technology*, Khimiya Press, Moscow, 1984.
7. B. S. Sazhin and L. I. Gudim, *Vortex Dust Collectors*, Khimiya Press, Moscow, 1995.
8. B. S. Sazhin, G. I. Yefremov, V. B. Sazhin, and V. A. Mukhamedzhanova, in *Proc. of the 10th Int. Conf. of Young Scientists on Chemistry and Chemical Technology*, RITs RKhTU Press, Moscow, 1996, Pt. 2, p. 291.
9. *Cyclones of Scientific Research Institute of Gas Cleaning. Instructions on Design, Manufacture, Assembly and Operation*, Yaroslavl, 1971.
10. S. S. Yankovskiy and N. G. Bulgakova, *Prom. San. Ochist. Gazov*, No. 3, p. 14, TsINTIKhimneftemash Press, Moscow, 1982.
11. S. S. Yankovskiy and N. G. Bulgakova, *Prom. San. Ochist. Gazov*, No. 4, pp. 9–10, TsINTIKhimneftemash Press, Moscow, 1981.
12. K. Budinsky, *Vyvoj protiproudeho viroveho odlncovace, Yyzkumna zprava VUV*, Praha, 1971.
13. K. Budinsky, *Vyvoj protiproudeho viroveho odlncovace, Yyzkumna zprava VUV*, Praha, 1972.
14. H. Klein and P. Schmidt, *Verfahrenstechnik*, Vol. 5, No. 8, pp. 316–319, 1971.
15. *Tornado Dust Collector*. Prospectuses of Lufttechnik Bayreuth Ruskamp GmbH firm, Munchen, 1995.

Chapter 10

1. A. I. Andryushchenko and A. B. Dubinin, *Izv. Vyssh. Uchebn. Zaved., Energetika*, No. 2, pp. 91–94, 1969.
2. V. M. Brodyanskiy, V. Fratsher, and K. Mikhalek, *Exergy Method and Its Application*, Energoatomizdat Press, Moscow, 1988.
3. V. M. Brodyanskiy and M. V. Sorin, *Izv. Vyssh. Uchebn. Zaved., Energetika*, No. 1, pp. 60–65, 1985.
4. V. M. Brodyanskiy, *Problems of Thermodynamic Analysis*, Mir Press, Moscow, 1965.

5. G. Beer, *Engineering Thermodynamics* [Russian translation], Mir Press, Moscow, 1977.
6. M. P. Vukalovich and V. A. Kirilin, *Thermodynamic Properties of Gases*, Mashgiz Press, Moscow, 1953.
7. M. P. Vukalovich, *Thermodynamic Properties of Water and Water Vapor*, Mashgiz Press, Moscow, 1958.
8. D. P. Gokhshtein, *Modern Methods of Thermodynamic Analysis of Power Plants*, Energiya Press, Moscow, 1969.
9. V. I. Yevenko, *Izv. Vyssh. Uchebn. Zaved., Energetika*, No. 8, pp. 96–100, 1989.
10. N. V. Kalinin, *Kholod. Tekh.*, No. 4, pp. 21–22, 1965.
11. G. N. Kostenko, *Prom. Teplotekh.*, Vol. 5, No. 4, pp. 70–73, 1983.
12. I. A. Leites, *Teor. Osnovy Khim. Tekhnol.*, Vol. 7, No. 1, pp. 24–29, 1973.
13. V. I. Prokhorov and S. M. Shilkloper, *Kholod. Tekh.*, No. 9, pp. 37–41, 1981.
14. B. S. Sazhin, *Principles of Drying Technology*, Khimiya Press, Moscow, 1984.
15. B. S. Sazhin and A. P. Bulekov, *Exergy Method in Chemical Technology*, Khimiya Press, Moscow, 1992.
16. V. B. Sazhin, in *Ext. Abstr. of Papers presented at the 5th All-Union Scientific Technical Conf. "The Role of Young Designers and Researchers of Chemical Machine Construction in Implementing Comprehensive Programs Aimed at Accelerating the Scientific Technical Progress in the Industry,"* Severodonetsk, 1986, p. 162.
17. L. N. Sidelkovskiy and E. Ya. Falkov, *Exergy Balances of Fire Technical Processes*, MEI Press, Moscow, 1967.
18. M. V. Sorin and V. M. Brodyanskiy, *Izv. Vyssh. Uchebn. Zaved., Energetika*, No. 3, pp. 76–88, 1985.
19. I. K. Chernyshevskiy, *Izv. Vyssh. Uchebn. Zaved., Ser. Khim. Khim. Tekhnol.*, Vol. 10, No. 7, pp. 825–829, 1967.
20. Ya. Shargut and R. Petele, *Exergy*, Energiya Press, Moscow, 1968.
21. Ye. I. Yantovskiy, *Prom. Energet.*, No. 1, pp. 33–37, 1985.
22. W. Boie, *Von Bernnstoff zum Rauchgas* Verl, B. Leipzig Teubner, 1957.
23. T. J. Kotas, *The Exergy Method of Thermal Plant*, Butterworths, London, 1985.
24. W. Moebus, *Wiss. Zeitschr. der T. U. Dresden*, Vol. 16, No. 3, pp. 961–965, 1967.
25. Z. Rant, *Gas — Wärme*, Vol. 12, No. 8, pp. 297–304, 1963.
26. Z. Rant, *BWK*, Vol. 12, No. 7, pp. 297–301, 1960.
27. Z. Rant, *Alg. Wärmetechn.*, Vol. 10, No. 9, pp. 172–176, 1959.
28. Yunfei Li and Chengzhi Wang, in *Proc. of the 10th Int. Drying Symp. "Drying 96" (IDS'96)*, Krakow, Poland, 30 July–2 August 1996, Vol. B, pp. 801–804.

Chapter 11

1. V. M. Brodyanskiy, *Teploenergetika*, No. 1, pp. 63–66, 1989.
2. A. S. Ginzburg, *Theoretical and Technological Principles of Drying of Foodstuffs*, Pishchevaya Promyshlennost Press, Moscow, 1973.
3. M. D. Levin, *Thermodynamic Theory and Calculation of Drying Units*, Pishchepromizdat Press, Moscow, 1969.

4. A. A. Oigenblik, B. A. Koryagin, V. B. Sazhin, and S. V. Sorokin, in *Ext. Abstr. of Papers presented at the Republican Conf. "The New in the Theory of Heat and Mass Transfer in Drying Processes,"* UkrNIINTI Press, Kiev, 1987, p. 23.
5. B. S. Sazhin and A. P. Bulekov, *Exergy Method in Chemical Technology*, Khimiya Press, Moscow, 1992.
6. B. S. Sazhin, *Principles of Drying Technology*, Khimiya Press, Moscow, 1984.
7. J. Beger, *Energieanwendung*, Vol. 19, No. 12, pp. 358–361, 1970.

Chapter 12

1. A. I. Andryushchenko and A. B. Dubinin, *Izv. Vyssh. Uchebn. Zaved., Energetika*, No. 2, pp. 91–94, 1969.
2. A. I. Andryushchenko and Yu. M. Khlebalin, *Izv. Vyssh. Uchebn. Zaved., Energetika*, No. 4, pp. 68–72, 1987.
3. V. M. Brodyanskiy, V. Fratsher, and K. Mikhalek, *Exergy Method and Its Application*, Energoatomizdat Press, Moscow, 1988.
4. V. M. Brodyanskiy, *Problems of Thermodynamic Analysis*, Mir Press, Moscow, 1965.
5. V. M. Brodyanskiy, *Teploenergetika*, No. 1, pp. 63–66, 1989.
6. N. I. Gelperin and V.A. Shur, *Khim. Prom.*, No. 2, pp. 100–103, 1986.
7. A. M. Gorlenko, *Prom. Energet.*, No. 9, pp. 2–7, 1986.
8. D. D. Kalafati and V. V. Popalova, *Optimization of Heat Exchangers with Respect to Heat Transfer Efficiency*, Energoatomizdat Press, Moscow, 1986.
9. V. V. Kafarov, V. L. Perov, and D. A. Bobrov, *Itogi Nauki Tekh., Ser. Prots. Appar. Khim. Tekhnol.*, Vol. 11, pp. 3–119, 1983.
10. G. N. Kostenko, *Prom. Teplotekh.*, Vol. 5, No. 4, pp. 70–73, 1983.
11. M. D. Levin, *Thermodynamic Theory and Calculation of Drying Units*, Pishchepromizdat Press, Moscow, 1969.
12. I. L. Leites, M. Kh. Sosnina, and V. P. Semyonov, *Theory and Practice of Chemical Energy Technology*, Khimiya Press, Moscow, 1988.
13. I. A. Leites, *Teor. Osnovy Khim. Tekhnol.*, Vol. 7, No. 1, pp. 24–29, 1973.
14. V. P. Nesterov, N. V. Korovin, and V. M. Brodyanskiy, *Izv. Vyssh. Uchebn. Zaved., Ser. Khim. Khim. Tekhnol.*, Vol. 19, No. 5, pp. 33–37, 1976.
15. B. P. Nesterov, N. V. Korovin, and V. M. Brodyanskiy, *Elektrokhimiya*, Vol. 17, pp. 1697–1700, 1981.
16. B. S. Sazhin, *Principles of Drying Technology*, Khimiya Press, Moscow, 1984.
17. B. S. Sazhin and B. S. Shutov, *Exergy Analysis of Operation of Heat-Utilizing Plants*, RIO MTI Press, Moscow, 1979.
18. B. S. Sazhin and A. P. Bulekov, *Exergy Analysis in Chemical Technology*, Khimiya Press, Moscow, 1992.
19. V. Sazhin, I. M. Seldin, and O. I. Seldina, in *Ext. Abstr. of Papers presented at the Int. Thermophysical School "Thermophysical Problems of Industrial Production,"* Tambov, 1992, pp. 10–11.
20. M. V. Sorin and V. M. Brodyanskiy, *Teor. Osnovy Khim. Tekhnol.*, Vol. 19, No. 1, pp. 91–92, 1985.

21. M. Kh. Sosna, O. B. Goldina, G. Ya. Gelfer, and I. K. Loiko, *Khim. Prom.*, No. 1, pp. 46–48, 1989.
22. I. R. Chekhovskiy and S. I. Chekhovskiy, *Prom. Energet.*, No. 7, pp. 45–48, 1988.
23. Ya. Shargut and R. Petele, *Exergy*, Energiya Press, Moscow, 1968.
24. V. A. Shur, *Zh. Fiz. Khim.*, Vol. 57, No. 8, pp. 1922–1925, 1983.
25. I. T. Elperin, *Inzh.-Fiz. Zh.*, Vol. 4, No. 3, pp. 34–37, 1963.
26. Ye. I. Yantovskiy, V. S. Varvarskiy, A. P. Ostrovskiy, and B. Ye. Bruskovskiy, *Prom. Energet.*, No. 1, pp. 17–21, 1984.
27. Ye. I. Yantovskiy, *Prom. Energet.*, No. 1, pp. 33–37, 1985.
28. Ye. I. Yantovskiy, *Teploenergetika*, No. 2, pp. 65–66, 1986.
29. W. Kcesom, *Comm. Univ. Leiden Cammerling — Onnas. 4ab*, No. 76a, pp. 84–96, 1933.
30. D. Tondeur and E. Kvaalin, *Ind. Eng. Chem. Res.*, Vol. 28, No. 1, pp. 50–56, 1987.

Chapter 13

1. V. N. Bogoslovskiy and M. Ya. Poz, *Thermophysics of Devices Utilizing the Heat of Heating, Ventilation and Air Conditioning Systems*, Stroiizdat Press, Moscow, 1983.
2. A. P. Bulekov, K. K. Sansyzbayev, V. B. Sazhin, and B. S. Sazhin, in *Ext. Abstr. of Papers presented at the 9th Int. Conf. of Young Scientists on Chemistry and Chemical Technology*, PAN Press, Moscow, 1995, Pt. 2, pp. 206–207.
3. O. L. Danilov and B. I. Leonchik, *Energy Saving in Thermal Drying*, Energoatomizdat Press, Moscow, 1986.
4. O. L. Danilov, M. A. Maltsev, and V. V. Smagin, *Tr. MEI*, Issue 332, pp. 49–57, 1991.
5. A. I. Zaitsev and L. A. Levin, *Prom. Energet.*, No. 1, pp. 38–40, 1985.
6. V. V. Kafarov and V. L. Perov, *Dokl. Akad. Nauk SSSR*, Vol. 207, No. 1, pp. 142–144, 1972.
7. V. A. Mironova, A. M. Tsirlin, and Yu. B. Samarin, *Khim. Prom.*, No. 8, pp. 38–42, 1988.
8. Ya. A. Mikhailov, *Superheated Vapor Drying*, Energiya Press, Moscow, 1976.
9. V. L. Perov and D. A. Bobrov, *Khim. Prom.*, No. 1, pp. 43–45, 1978.
10. V. L. Perov, D. A. Bobrov, and A. M. Gorlenko, *Teor. Osnovy Khim. Tekhnol.*, Vol. 16, No. 1, pp. 245–250, 1982.
11. D. Ray, *Energy Saving in Industry* [Russian translation], Energoatomizdat Press, Moscow, 1983.
12. B. S. Sazhin, *Principles of Drying Technology*, Khimiya Press, Moscow, 1984.
13. B. S. Sazhin and A. P. Bulekov, *Exergy Method in Chemical Technology*, Khimiya Press, Moscow, 1992.
14. K. K. Sansyzbayev, A. P. Bulekov, and V. Sazhin, in *Ext. Abstr. of Papers presented at the 9th Int. Conf. of Young Scientists on Chemistry and Chemical Technology*, PAN Press, Moscow, 1995, Pt. 2, pp. 208–209.
15. V. V. Smagin, *The Use of Unsteady Power Input for Intensifying Drying of Sheet-Like Materials*, Candidate's Dissertation (Eng.), MEI Press, Moscow, 1986.

16. V. L. Tomashevskiy, I. M. Seldin, N. L. Movchan (Smirnova), O. I. Seldina, and V. B. Sazhin, in *Ext. Abstr. of Papers presented at the 10th Int. Conf. of Young Scientists on Chemistry and Chemical Technology*, RITs RkhTU Press, Moscow, 1996, Pt. 2, pp. 307–308.
17. N. S. Chaigenets, A. S. Ginzburg, and S. S. Chaigenets, *Teor. Osnovy Khim. Tekhnol.*, Vol. 23, No. 5, pp. 663–669, 1989.
18. S. Chi, *Heat Pipes. Theory and Practice* [Russian translation], Mashinostroenie Press, Moscow, 1981.
19. V. A. Shur, *Zh. Fiz. Khim.*, Vol. 57, No. 8, pp. 1922–1925, 1983.
20. V. A. Shur, *Khim. Prom.*, No. 1, pp. 47–49, 1985.
21. M. Chapelie, *Petrol et techniques*, Vol. 37, No. 3, pp. 115–117, 1977.
22. M. Deutsch, *Rev de d'Energu*, Vol. 30, No. 320, pp. 969–976, 1979.
23. F. Fremont, *Elec. World*, Vol. 197, No. 10, pp. 89–96, 1983.
24. W. Frotzcher and K. Michalik, *Hungarian of Ind. Chem. Veszpvem*, Vol. 6, pp. 163–174, 1978.
25. S. Fuji and H. Rameyana, *Ind. Chem Eng. Japan*, Vol. 10, No. 3, pp. 224–228, 1977.
26. B. Linhoff, *Proc. Roy. Soc. of London*, Vol. 386, pp. 1–33, 1983.
27. C. Lovis and R. Cola, *Ceram. Eng. Process.*, Vol. 4, No. 5, pp. 223–228, 1983.
28. I. E. Rodway, *Hydrocarbon Process.*, Vol. 56, No. 2, pp. 92–94, 1977.
29. T. Voshida and T. Hyodo, *Ind. Eng. Chem. Process. Des. Develop.*, Vol. 9, No. 2, pp. 93–99, 1970.
30. I. Zbicinski, W. Kaminski, K. Ciesielski, and P. Strumilo, in *Proc. of the 10th Int. Drying Symp. "Drying 96" (IDS'96)*, Krakow, Poland, 30 July–2 August 1996, Vol. B, pp. 1433–1440.