

## REFERENCES

---

1. Aseyev, G. G. and Zaitsev, I. D., Calculation of Activity Coefficients in Multicomponent Solutions of Strong Electrolytes, *Ukr. Khim. Zh.*, Russ. Ed., 1982, **48**, No. 6, 596–600.
2. Zaitsev, I. D. and Aseyev, G. G., Automated Information-Acquisition System for Thermophysical Properties of Inorganic Substances, *Upravl. Syst. Mash.*, Kiev, 1982, 122–125.
3. Zaitsev, I. D., Zozulya, A. F., and Aseyev, G. G., *Mashinnyi raschet fiziko-khimicheskikh parametrov neorganicheskikh veshchestv* (Computer-Aided Calculation of Physicochemical Parameters of Inorganic Substances), Moscow, Khimiya, 1983.
4. Aseyev, G. G., Tokar', M. I., and Kalyuzhnaya, L. N., Activity of Water and its Dependence on the Heat Capacity of Electrolyte Solutions, In: *Nauchno-tehnicheskii progress v proizvodstve khimicheskikh veshchestv i materialov* (Progress in the Science and Technology of the Production of Chemical Substances and Materials), Naukova Dumka, Kiev, 1984, pp. 98–99.
5. Zaitsev, I. D. and Aseyev, G. G., The SAPPFIR Code for Calculating Physicochemical Properties of Inorganic Substances and their Mixtures, *Inform. Byull. Khim. Promyshl. (PK po Khim. Promyshl. SEV)*, Moscow, 1984, No. 2(105), 33–35.
6. Aseyev, G. G. and Kalyuzhnaya, L. N., Method for Calculating Activity Coefficients of Binary Solutions of Electrolytes, In: *Nauchno-tehnicheskii progress v proizvodstve khimicheskikh veshchestv i materialov* (Progress in the Science and Technology of the Production of Chemical Substances and Materials), Naukova Dumka, Kiev, 1984, pp. 99–100.
7. Aseyev, G. G. et al., *Teploemkosti' rastvorov khloridov nekotorykh metallov chetvertogo perioda pri temperaturakh of 298,15 do 348,15 K* (Heat Capacity of the Chlorides of Some Metals of the Fourth Period at Temperatures of 298.15–348.15 K), KhNPO "Karbonat", Kharkov, 1985, Available from ONIITEKhim, Cherkassy, No. 1077khp-85dep.
8. Aseyev, G. G. and Tokar', M. I., Calculation of Activity Coefficients of Binary Solutions of Electrolytes from Heat Capacity Data, In: *Nauchno-tehnicheskii progress v proizvodstve khimicheskikh veshchestv i materialov* (Progress in the Science and Technology of the Production of Chemical Substances and Materials), Naukova Dumka, Kiev, 1984, pp. 98–99.
9. Aseyev, G. G. et al., *Issledovanie teploemkosti vodnykh rastvorov bromidov kaliya, ammoniya, magniya i kadmiya v zavisimosti of temperatury i kontsentratsii* (Study of the Heat Capacity of Aqueous Solutions of Potassium, Ammonium, Magnesium, and Cadmium Bromides as Functions of Tempera-

- ture and Concentration), KhNPO "Karbonat", 1985, Kharkov, Available from ONIITEKhIM, Cherkassy, No. 1198khp-85dep.
10. Aseyev, G. G., *Elektrostaticheskie, sol'vatatsionnye i khimicheskie vzaimodeistviya v kontsentririvannykh rastvorakh elektrolitov* (Electrostatic, Solvation, and Chemical Interactions in Concentrated Solutions of Electrolytes), KhNPO "Karbonat", Kharkov, 1988, Available from ONIITEKhIM, Cherkassy, No. 1153-khp88.
  11. Zaitsev, I. D. and Aseyev, G. G., *Fiziko-khimicheskie svoystva binarnykh i mnogokomponentnykh rasvorov neorganicheskikh veshchestv. Spravochnik* (A Handbook on the Physicochemical Properties of Binary and Multicomponent Solutions of Inorganic Substances), Khimiya, Moscow, 1988.
  12. Aseyev, G. G., Calculations of the Heat Capacity of Multicomponent Solutions of Electrolytes, In: *Metrologicheskoe obespechenie izmerenii parametrov sostava i svoystv veshchestv i materialov na predpriyatiyakh i v organizatsiyakh khimicheskoi promyshlennosti* (Metrological Maintenance and Control in Measurements of the Parameters of Composition and Properties of Substances and Materials at Factories and Organizations of Chemical Industry), Trudy KhNPO "Karbonat", Kharkov, 1988, Vol. 67, pp. 181–186.
  13. Aseyev, G. G., Calculations of the Viscosity of Multicomponent Aqueous Inorganic Systems, In: *Metrologicheskoe obespechenie izmerenii parametrov sostava i svoystv veshchestv i materialov na predpriyatiyakh i v organizatsiyakh khimicheskoi promyshlennosti* (Metrological Maintenance and Control in Measurements of the Parameters of Composition and Properties of Substances and Materials at Factories and Organizations of Chemical Industry), Trudy KhNPO "Karbonat", Kharkov, 1988, Vol. 67, pp. 186–189.
  14. Aseyev, G. G., *Teoreticheskaya zavisimost' koeffitsientov aktivnosti kontsentririvannykh rastvorov elektrolitov, osnovannaya na potentsiale mezhionnogo vzaimodeistviya* (Theoretical Dependence of the Activity Coefficients of Concentrated Solutions of Electrolytes Based on the Ion-Interaction Potential), KhNPO "Karbonat", Kharkov, 1989, Available from ONIITEKhIM, Cherkassy, No. 528-khp89.
  15. Aseyev, G. G., The Development of the Theory of Concentrated Solutions of Electrolytes, Trudy NIITEKhIM, Moscow, *Ser. Obshcheotrasl. Voprosy*, 1989, No. 8(286).
  16. Aseyev, G. G. and Yudina, L. V., *Srednie ionnye koeffitsienty aktivnosti sil'nykh elektrolitov v vodnykh rastvorakh, zavisyashchie ot elektrostaticheskikh, sol'vatatsionnykh i khimicheskikh vzaimodeistvii* (Average Ionic Activity Coefficients of Strong Electrolytes in Aqueous Solutions as Functions of Electrostatic, Solvation, and Chemical Interactions), KhNPO "Karbonat", Kharkov, 1990, Available from ONIITEKhIM, Cherkassy, No. 688-khp90.
  17. Aseyev, G. G., *Issledovanie uravneniya rascheta koeffitsientov aktivnosti kontsentririvannykh rastvorov elektrolitov* (Study of the Equations for Calculations of Activity Coefficients of Concentrated Solutions of Electrolytes), KhNPO "Karbonat", Kharkov, 1990, Available from ONIITEKhIM, Cherkassy, No. 98-khp90.
  18. Aseyev, G. G. and Yudina, L. V., *Aktivnost' vody v kontsentririvannykh rastvorakh elektrolitov i mezhionnye vzaimodeistviya* (Activity of Water in Concentrated Solutions of Electrolytes and Interionic Interactions), KhNPO "Karbonat", Kharkov, 1990, Available from ONIITEKhIM, Cherkassy, No. 133-khp91.
  19. Aseyev, G. G., Transport Properties in Concentrated Solutions of Electrolytes (Electrical Conductivity, Viscosity, Diffusion), *Obzory Teplofiz. Svoystv. Veshchestv*, Akad. Nauk SSSR, Moscow, 1991, No. 5(91).
  20. Aseyev, G. G., Theory of Irreversible Processes in Solutions of Electrolytes, Moscow, Trudy NIITEKhIM, *Ser. Obshcheotrasl. Voprosy*, 1991, No. 2(304).
  21. Zaitsev, I. D. and Aseyev, G. G., *Properties of Aqueous Solutions of Electrolytes*, CRC Press, Boca Raton–Ann Arbor–London–Tokyo, 1992.
  22. Aseyev, G. G. and Zaitsev, I. D., *Volumetric Properties of Electrolyte Solutions: Estimation Methods and Experimental Data*, Begell House, New York, 1996.
  23. Aseyev, G. G. and Zaitsev, I. D., *Thermal Properties of Electrolyte Solutions. Methods for Calculation of Multicomponent Systems and Experimental Data*, Begell House, New York, 1996.
  24. Aseyev, G. G., *Electrolytes. Interparticle Interactions. Theory. Calculation Methods and Experimental Data*, Begell House, New York, 1997.

25. Oelkers, E. H. and Helgeson, H. C., Calculation of the Transport Properties of Aqueous Species at Pressures to 5Kb and Temperatures to 1000°C, *J. Solut. Chem.*, 1989, **18**, No. 7, 601–640.
26. Zaitseva, L. A., Ivanov, A. A., and Lepeshkov, I. N., Electrical Conductivity of the  $\text{MgSO}_4\text{--Na}_2\text{SO}_4\text{--H}_2\text{O}$  System, *Zh. Neorg. Khim.*, 1989, **34**, No. 5, 1330–1334.
27. *Spravochnik po khimii* (A Handbook of Chemistry), Sukhotin, A. M., Ed., Khimiya, Leningrad, 1961.
28. Landolt-Bornstein, 1950–1980 and New Series 1961–1985, 6th Ed., Springer, Berlin, Bd. II/Sa, II/7.
29. *Kratkii spravochnik fiziko-khimicheskikh velichin* (A Concise Handbook of Physicochemical Constants), Ravdel', A. A. and Ponomareva, A. M., Eds., 8th Ed., Khimiya, Leningrad, 1983.
30. Timmermans, J., *The Physico-Chemical Constants of Binary Systems in Concentrated Solutions. V.3. Systems with Metallic Compounds*, Interscience-Wiley, New York, 1960, pp. 302–1030.
31. Postler, M., Conductance of Concentrated Aqueous Solutions of Electrolytes. 2. Strong Polyvalent Electrolytes, *Collect. Czech. Chem. Commun.*, 1970, **35**, No. 8, 2244.
32. *Tekhnicheskaya entsiklopediya: Spravochnik fizicheskikh, khimicheskikh i tekhnologicheskikh velichin* (Technical Encyclopedia: A Handbook of Physical, Chemical, and Technological Constants), Sov. Encyclopedia, Moscow, 1930, Vol. 7, pp. 250–255.
33. Ivanov, A. A., Zaitseva, L. A., Selin, A. N., Kim, V. P., and Lepeshkov, I. N., Electrical Conductivity of  $\text{H}_2\text{SO}_4\text{--Al}_2(\text{SO}_4)_3\text{--H}_2\text{O}$  Solutions, *Zh. Neorg. Khim.*, 1989, **34**, No. 4, 1040–1044.
34. Powell, D. H. and Neilson, G. W., The Concentration Dependence of the  $\text{Ni}^{2+}$  Hydration Geometry in Aqueous Solution, *J. Phys. Condens. Matter*, 1990, No. 2, 3871–3878.
35. Ivanov, A. A., Kirilenko, I. A., Selin, A. N., and Zaitseva, L. A., Properties of Concentrated Aqueous Solutions of Aluminum Sulfate, *Zh. Neorg. Khim.*, 1987, **32**, No. 4, 1052–1056.
36. Tyrell, H. J. V., Harris, K. R., *Diffusion in Liquids: a Theoretical and Experimental Study*, Butterworth, London, 1984.
37. Deboš, D., *Electrochemical Data*, Budapest, Académia Kiadó, 1978.
38. *Spravochnik khimika* (A Handbook of Chemistry), Nikol'skii, B. N. et al., Eds., Moscow, Khimiya, Vol. 3, 1965.
40. Isono, T., Density, Viscosity and Electrolytic Conductivity of Concentrated Aqueous Electrolyte Solutions at Several Temperatures. Alkaline-Earth Chlorides,  $\text{LaCl}_3$ ,  $\text{Na}_2\text{SO}_4$ ,  $\text{NaNO}_3$ ,  $\text{NaBr}$ ,  $\text{KNO}_3$ ,  $\text{KBr}$  and  $\text{Cd}(\text{NO}_3)_2$ , *J. Chem. Eng. Data*, 1984, **29**, 45–52.
39. Robinson, R. A., Stokes R. H., *Electrolyte Solutions*, 2nd Ed., Butterworth, London, 1959.
41. Bianchi, H., Cirti, H. R., Fernandez-Primi, R., The Conductivity of Dilute Solutions of Mixed Electrolytes. 1. The System  $\text{NaCl--BaCl}_2$  at 298.2 K, *J. Chem. Soc. Faraday Trans. I*, 1987, **83**, No. 9, 3027–2037.
42. Kondrat'ev, V. P. and Nikich, V. I., Specific Conductivity of Aqueous Solutions of Alkaline-Metal Chlorides at High Temperatures, *Zh. Fiz. Khim.*, 1963, **37**, No. 1, 100–105.
43. Frantz, J., Marshall, W., Electrical Conductances of Aqueous Calcium Chloride and Magnesium Chloride Solutions from 25 to 600°C at Pressures up to 4000 Bars, In: *Proc. of the 9th Intern. Conf. on the Properties of Steam Held at München*, 10–14 Sept. 1979, Pergamon Press, Oxford etc., 1980.
44. Claes, P., Loix, G. Y., et Glibert, J., Maximum de Conductivite des Solutions Aqueses d'Electrolytes, *Electrochim. Acta*, 1983, **28**, No. 4, 421–427.
45. Salem, Z., Vorob'ev, A. F., and Shcherbakov, V. V., *Elektroprovodnost' rastvorov khloridov litiya, natriya, kaliya, kal'tsiya i iodida natriya v smesyakh voda--ammiak* (Electrical Conductivity of Lithium, Sodium, Potassium, Calcium Chlorides and Sodium Iodide in Water–Ammonia Mixtures), MKhTI im. Mendeleeva, Moscow, 1990, Available from VINITI, No. 1757-V90.
46. Ambrus, J. H., Moynihan, C. T., and Macedo, P. B., Conductivity Relaxation in a Concentrated Aqueous Electrolyte Solution, *J. Phys. Chem.*, 1972, **76**, No. 22, 3287–3295.
47. Vorob'ev, A. F., Shcherbakov, V. V., and Ksenofontova, N. A., The Nature of Electrical Conductance and Association of Ions in Solution of Electrolytes, In: *Termodinamicheskie svoistva rastvorov* (Thermodynamic Properties of Solutions), Mezhevuzovskii sb. no. 1, MKhTI im. Mendeleeva, Moscow, 1980, No. 111, 21–34.
48. Abraham, M. and Abraham, M.-C., Electrolytic Conductance and Viscosity of some Mixed Nitrate-Water Systems from Fused Salts to Dilute Solutions, *Electrochimica Acta*, 1986, **31**, No. 7, 821–829.
49. Eastel, A. J., Price, W. E., and Woolf, L. A., Diaphragm Cell for High-Temperature Diffusion Measurements, *J. Chem. Soc. Faraday Trans. I*, 1989, **85**, No. 5, 1091–1097.

50. Schmelzer, N., Grigo, M., Zorn, B., Einfeldt, J., Leitfähigkeitsuntersuchungen an wäßrigen  $\text{Me}^{2+}$  Sulfatlosungen bei 25°C, *Wiss. Z. Wilhelm-Pieck-Univ. Rostock*, **34**, No. 1, 1985, 25–30.
51. Maksimova, I. N. et al., *Svoistva elektrolitov. Spravochnoe izdanie* (A Handbook of Electrolyte Properties), Metallurgiya, Moscow, 1987.
52. *Rastvory elektrolitov v vysoko- i nizkotemperaturnom rezhimakh. Fiziko-khimicheskoe issledovanie* (A Physicochemical Investigation into the Properties of Electrolytes at Low and High Temperatures), Maksimova, I. N., Ed., Izd. Leningrad. Gos. Univ., Leningrad, 1980.
53. Pak Chzhon Su and Maksimova, I. N., Electrical Conductivity of Alkali Metal Solutions and the Method of Comparative Calculations, *Zh. Prikl. Khim.*, 1986, No. 11, 2543–2545.
55. Lileev, A. S., Tepavicharova, S., Lyashchenko, A. K., and Balarev, Kh., Dielectric Properties of Saturated Solutions and the Solubility Diagram of the  $\text{CsCl-NiCl}_2\text{-H}_2\text{O}$  System, *Zh. Neorg. Khim.*, 1989, **34**, No. 2, 503–507.
56. Nakahara, M., Temperature Dependence of Relaxation and Electrophoretic Terms in Onsager's Limiting Equation of Conductance for LiCl, KCl, and CsCl in Water from –40 to 100°C, *J. Phys. Chem.*, 1984, **88**, 2138–2140.
57. Papadopoulos, N. and Ritzoulis, G., Conductance of CsCl in Acetonitrile-Water Mixtures at 10, 20 and 30°C, *Annali di Chimica*, 1989, **79**, Nos. 7–8, 389–395.
58. Miller, D. G., Rard, J. A., Eppstein, L. B., and Robinson, R. A., Mutual Diffusion Coefficients, Electrical Conductances, Osmotic Coefficients, and Ionic Transport Coefficients  $I_j$  for Aqueous  $\text{CuSO}_4$  at 25°C, *J. Solut. Chem.*, 1980, **9**, No. 7, 467–496.
59. Qingquan Su, Yoshiaki Umetsu, and Kazuteru Tozawa, Estimation of the Concentration of Hydrating Water and its Application to Discussion for Electric Conductivity and Viscosity of Acidic Sulfate Solutions, *Bull. Res. Inst. Mineral Dressing and Metallurgy Tohoku Univ.*, June 1988, **44**, No. 1, 112–122.
60. Shut'ko, A. P., Butchenko, L. I., Rozhkova, Z. Z., and Kvasko, V. N., Some Physicochemical Properties of Solutions of Mixtures of Iron Chloride with Aluminum Chloride and Hydroxychlorides, *Zh. Neorg. Khim.*, 1990, **35**, No. 9, 2372–2376.
61. Venkateswara Sastry, V. and Kalidas, C., Conductance of HCl and HBr in Water-Propylene Glycol Mixtures, *Indian J. Chem.*, 1985, **24A**, No. 8, 658–660.
62. Baldanov, M. M., Tanganov, B. B., and Mokhosoev, M. V., Electrical Conductance of Solutions and the Kinetic Boltzmann Equation, *Zh. Fiz. Khim.*, 1990, **62**, No. 1, 88–94.
63. Ivanov, A. A., Electrical Conductance of Aqueous Solutions of Acids and Hydroxides, *Izv. Vyssh. Uchebn. Zaved., Khim. Khim. Tekhnol.*, 1989, **32**, No. 10, 3–16.
64. Weingartner, H. and Chatzidimitriou-Dreismann, C. A., Anomalous  $\text{H}^+$  and  $\text{D}^+$ . Conductance in  $\text{H}_2\text{O-D}_2\text{O}$  Mixtures, *J. Nature*, 1990, **346**, No. 6284, 548–550.
65. Ueno, M., Nakahara, M., and Osugi, J., Effect of Pressure on the Conductivities of HCl and KCl in Water at 0°C, *J. Solut. Chem.*, 1979, **8**, No. 12, 881–886.
66. Gurovich, B. M. et al., *Tablitsy teplofizicheskikh svoistv vodnykh rastvorov nekotorykh neorganicheskikh veshchestv* (Tables of Thermophysical Properties of Aqueous Solutions of some Inorganic Substances), TPI, Tashkent, 1975.
67. Shcherbakov, V. V., Eriakov, V. I., Ershova, L. Ya., Troitskii, D. A., Salem, Z., and Chistov, A. M., Electrical Conductivity and Dielectric Constant of Concentrated Hydrochloric and Sulfuric Acids and their Mixtures, In: *Termodinamicheskie svoistva rastvorov* (Thermodynamic Properties of Solutions), Vorob'ev, A. F., Ed., MKhTI im. Mendeleeva, Moscow, 1989, No. 158, pp. 117–119.
68. Eastel, A. J., Giaquinta, P. V., March, N. H., and Tosi, M. P., Chemical Effects in Diffusion and Structure of Zinc Chloride in Aqueous Solution, *J. Chem. Phys.*, 1983, **76**, 125–128.
69. Ivanov, A. A. and Zaitseva, L. A., Electrical Conductivity of Four-Component Systems of the Water-Three-Electrolytes Type, *Zh. Neorg. Khim.*, 1989, **34**, No. 8, 2160–2165.
70. Campbell, A. N. et al., The Conductance of Aqueous Solutions of Sulfuric Acid at 50°C and 75°C, *Canad. J. Chem.*, 1953, **31**, No. 4, 303–305.
71. Zaitseva, L. A., Ivanov, A. A., and Lepeshkov, I. N., Electrical Conductivity of  $\text{ZnSO}_4\text{-H}_2\text{SO}_4\text{-H}_2\text{O}$  and  $\text{MgSO}_4\text{-H}_2\text{SO}_4\text{-H}_2\text{O}$  Solutions, *Zh. Neorg. Khim.*, 1988, **33**, No. 8, 2117–2133.
72. Postler, M., Conductance of Concentrated Aqueous Solutions of Electrolytes. 1. Strong Univalent Electrolytes, *Collect. Czech. Chem. Commun.*, 1970, **35**, No. 2, 535.

73. Kondrat'ev, V. P. and Gorbachev, S. V., Electrical Conductivity of Aqueous Solutions of Potassium Salts at High Temperatures, *Zh. Fiz. Khim.*, 1965, **39**, No. 12, 2993–2996.
74. Goldsack, E., Franchetto, R., Franchetto, A., Solvation Effects on the Conductivity of Concentrated Electrolyte Solutions, *Can. J. Chem.*, 1976, **54**, 2953–2966.
75. Karapetyan, B. A., Eichis, B. N., and Kundirenko, D. V., Application of the Robinson–Stokes Equation for Calculating Association Constants and Electrical Conductivity of Solutions of Electrolytes, *Ukr. Khim. Zh.*, Russ. Ed., 1988, **54**, No. 12, 1278–1281.
76. Ueno, M., Yoneda, A., Tsuchihashi, N., and Shimizu, K., Solvent Isotope Effect on Mobilities of Potassium and Chloride Ions in Water at High Pressure. II. A Low Temperature Study, *J. Chem. Phys.*, 1987, **86**, No. 8, 4678–4683.
77. Wu, Y. C., Koch, K. W., and Koch, W. F., Determination of the Absolute Specific Conductance of Primary Standard KCl Solutions, *J. Solut. Chem.*, 1989, **18**, No. 6, 515–528.
78. Saulnier, P. and Barthel, J., Determination of Electrolytic Conductivity of a 0.01 M Aqueous Potassium Chloride Solution at Various Temperatures by an Absolute Method, *J. Solut. Chem.*, 1979, **8**, No. 12, 847–852.
79. Markova, V. G., Goncharov, V. V., and Yashkichev, V. I., Self-Diffusion of  $^{36}\text{Cl}$  and  $^{131}\text{I}$  in Aqueous Solutions of Lithium, Sodium, and Potassium Chlorides, *Zh. Fiz. Khim.*, 1974, **48**, No. 8, 2133–2134.
80. Molenat, J., Etude systematique de la conductivite a 25°C dans les solutions concentrees des halogenures alcalins, *J. Chim. Phys.*, 1969, **66**, 825.
81. Albright, J. G., Mathew, R., and Miller, D. G., Measurements of Binary and Ternary Mutual Diffusion Coefficients of Aqueous Sodium and Potassium Bicarbonate Solutions at 25°C, *J. Phys. Chem.*, 1987, No. 91, 210–215.
82. Raineri, R. O. and Timmermann, E. O., Influence of Ionic Traces Upon the Electric Conductivity of an Electrolyte Solution. On the Possibility of Obtaining the Trace Mobility of an Ion Exclusively by Conductance Measurements, *Ber. Bunsenges, J. Phys. Chem.*, 1986, No. 90, 802–809.
83. Sangwal, K., Olczyk, E., Effect of pH on the Electrical Conductance of Saturated Aqueous Solutions of  $\text{KH}_2\text{PO}_4$  and its Solubility, *Cryst. Res. Technol.*, 1990, **25**, No. 1, 65–70.
84. Abraham, M., Abraham, M. C., Transport Properties and Hole Theory in the concentration Range from Fused Salts to Dilute Aqueous Solutions, *Electrochim. Acta*, 1987, **32**, No. 10, 1487.
85. Nakahara, M. and Zenke, M., Conductance of Potassium Iodide in Supercooled Water, *Bull. Chem. Soc. Jpn.*, 1987, **60**, 493–496.
86. Behret, H., Schmithals, F., Leitfaehigkeitmessungen an Konzentrierten Alkalichlorid- und -nitratlösungen, *Z. Naturforsch.*, 1975, **30a**, 1497–1498.
87. Gupta, R. L. and Ismail, K., Electrical Conductance of Sodium and Potassium Nitrates in Aqueous Medium, *Can. J. Chem.*, 1990, **68**, 2115–2118.
88. Guanti, R. J., Moran, P. J., Measurement of Electrolytic Conductivity in Highly Conducting Solutions, *J. Applied Electrochem.*, 1986, **16**, No. 5, 672–682.
89. Baldynova, F. P. and Maksimova, I. N., Viscosity, Density, and Electrical Conductivity of  $\text{K}_4\text{P}_2\text{O}_7$  Solutions, *Zh. Prikl. Khim.*, 1987, No. 6, 1401–1404.
90. Valyashko, V. M. and Ivanov, A. A., Electrical Conductivity of Concentrated Solutions of Alkali Metal Sulfates at Temperatures up to 75°C, *Zh. Neorg. Khim.*, 1974, **19B**, 1628.
91. Fried, I. and Segal, M., Electrical Conductivity of Concentrated Lithium Bromide Aqueous Solutions, *J. Chem. Eng. Data*, 1983, **28**, 127–130.
92. Baron, N. M. and Shcherba, M. U., Electrical Conductivity of Aqueous Solutions of LiCl, LiBr, and LiI at Low and Medium Temperatures, *Zh. Prikl. Khim.*, 1971, No. 9, 2118–2120.
93. Tanaka, K. and Tamamushi, R., A Physico-Chemical Study of Concentrated Aqueous Solutions of Lithium Chloride, *Z. Naturforsch.*, 1991, No. 46a, 141–147.
94. Novak, J., Electrical Conductance of the  $\text{LiNO}_3\text{-H}_2\text{O-DMSO}$  System, *Chem. Papers-Chemicke Zvesti*, 1986, **40**, No. 1, 31–36.
95. Corti, H., Crovetto, R., and Fernandez-Prini, R., Aqueous Solutions of Lithium Hydroxide at Various Temperatures: Conductivity and Activity Coefficients, *J. Solut. Chem.*, 1979, **8**, No. 12, 897–908.
96. Phang, S., Stokes, R. H., Density, Viscosity, Conductance and Transference Number of Concentrated Aqueous Magnesium Chloride at 25°C, *J. Solut. Chem.*, 1980, **9**, No. 7, 497–505.
97. Spallek, M. W. and Weingartner, H., Electrical Conductance of Aqueous Magnesium Chloride at 25°C, *J. Solut. Chem.*, 1990, **19**, No. 5, 483–490.

97. Bianchi, H., Corti, H. R., and Fernandez-Prini, R., The Conductivity of Dilute Aqueous Solutions of Magnesium Chloride at 25°C, *J. Solut. Chem.*, 1988, **17**, No. 11, 1059–1065.
98. Baldanov, M. M., Ion-Plasma Approximation in the Theory of Solutions of Electrolytes, *Izv. Vyssh. Uchebn. Zaved., Khim. Khim. Tekhnol.*, 1986, **29**, No. 8, 38–44.
99. Larionov, E. G. and Kryukov, P. A., Electrical Conductivity of Aqueous Solutions of MgSO<sub>4</sub> at Temperatures of 298–423 K and Pressures of 0.1–784.6 MPa, *Izv. Sib. Otd. Akad. Nauk SSSR, Ser. Khim. Nauk*, 1984, **15**, No. 5, 20–23.
100. Zaitseva, L. A. Ivanov, A. A., and Lepeshkov, I. N., Electrical Conductivity of Na<sub>2</sub>SO<sub>4</sub>–MgSO<sub>4</sub>–H<sub>2</sub>O Solutions, *Zh. Neorg. Khim.*, 1989, **34**, No. 5, 1330–1334.
101. Fisher, F. H. and Fox, A. P., Electrical Conductance of Aqueous Solutions of KCl at Pressures up to 2000 atm, *J. Solut. Chem.*, 1979, **8**, No. 9, 627–634.
102. Zaitseva, L. A. and Ivanov, A. A., Properties and Structure of Concentrated Aqueous Solutions of Magnesium and Zinc Sulfates, *Zh. Neorg. Khim.*, 1988, **33**, No. 7, 1840–1844.
103. Desnoyers, J. E., Arel, M., and Leduc, P. A., Conductance and Viscosity of *n*-Alkamine Hydrobromides in Water at 25°C: Influence of Hydrophobic Hydration, *Canad. J. Chem.*, 1969, **47**, No. 4, 547–553.
104. Taniewska-Osinska, S., Kozlowski, Z., Nowicka, B., Bald, A., and Szeigis, A., Heat of Solution and Electric Conductivity in Water-Tetrahydrofuran Mixtures, *J. Chem. Soc. Faraday Trans. I*, 1989, **85**, No. 3, 479–483.
105. Sidkey, M. A. and Farag B. S., Effect of Ultrasonic Waves on Electrolytic Conductivity of Nickel Sulphate, *Indian J. Pure Appl. Phys.*, 1986, No. 24(May), 226–229.