

# References

Table A.3 Values of selected parameters for selected solvents

- Abboud, J.-L. M., Notario, R., Bertrán, J., and Solà, M. (1993). *Prog. Phys. Org. Chem.*, **19**, 1–182.
- Abboud, J.-L. M. and Taft, R. W. (1979). *J. Phys. Chem.*, **83**, 412–419.
- Abboud, J.-L. M., Taft, R. W., and Kamlet, M. J. (1985). *J. Chem. Soc., Perkin Trans.*, **2**, 815–819.
- Abraham, M. H. (1982). *J. Am. Chem. Soc.*, **104**, 2085–2094.
- Abraham, M. H. (1974). *Prog. Phys. Org. Chem.*, **11**, 1–87.
- Abraham, M. H., Grellier, P. L., and McGill, R. A. (1988). *J. Chem. Soc., Perkin Trans.*, **2**, 339–345.
- Adams, C., Earle, M., Roberts, G., and Seddon, K. (1998). *Chem. Commun.*, **19**, 2097–2098.
- Ahlberg, P., Davidson, Ö., Löwendahl, M., Hilmersson, G., Karlsson, A., Håkansson, M. (1997). *J. Am. Chem. Soc.*, **119**, 1745–1750.
- Ahrland, S., Chatt, J., and Davies, N. R. (1958). *Quart. Rev. (London)*, **12**, 265–276.
- Allerhand, A. and Schleyer, P. v. R. (1963). *J. Am. Chem. Soc.*, **85**, 371–380.
- Alvarez, F. J. and Schowen, R. L. (1987). In Buncel, E. and Lee, C. C., eds. *Isotopes in organic chemistry*, Elsevier, Vol 7, pp 1–60.
- American Society for Testing and Materials (1982). *Annual book of ASTM standards 1982*, Part 29, pp. 142–144 (ASTM D 1133–78), Philadelphia, PA.
- Amis, E. S. and LaMer, V. K. (1939). *J. Am. Chem. Soc.*, **61**, 905–913.
- Amis, E. S. and Hinton, J. F. (1973). *Solvent effects on chemical phenomena*, Vol. 1, Academic Press, New York and London.
- Amis, E. S. and Price, J. E. (1943). *J. Phys. Chem.*, **47**, 338–348.
- Arshadi, M., Yamdagni, R., and Kebarle, P. (1970). *J. Phys. Chem.*, **74**, 1475–1482.
- Ashbaugh, H. S. and Paulaitis, M. E. (1996). *J. Phys. Chem.*, **100**, 1900–1913.
- Atkins, P. W. (1998). *Physical chemistry*, 6th edn. Oxford University Press, Oxford, and Freeman, New York.
- Audrieth, L. F. and Kleinberg, J. (1953). *Non-aqueous solvents*. Wiley, New York; Chapman and Hall, London.
- Bagno, A. (1998). Winter School on Organic Chemistry, Bressanone, Italy.
- Balakrishnan, V. K., Dust, J. M., vanLoon, G. W., and Buncel, E. (2001). *Can. J. Chem.*, **79**, 157–173.
- Barrow, G. M. (1988). *Physical chemistry*, 5th edn. McGraw-Hill, New York, pp. 327–340.
- Barthel, J. and Gores, H.-J. (1994). In Mamantov, G. and Popov, A. I., eds. *Chemistry of nonaqueous solutions: Current progress*, VCH, New York, Weinheim, Cambridge, pp. 6, 11.
- Barton, A. F. M. (1975). *Chem. Rev.*, **75**, 731–753.
- Basolo, F. and Pearson, R. G. (1967). *Mechanisms of inorganic reactions*, 2nd edn. Wiley, New York.
- Bates, E. D., Mayton, R. D., Ntai, I., Davis, J. H. Jr. (2002). *J. Am. Chem. Soc.* **124**, 926–927.
- Becke, A. D. (1997). *J. Chem. Phys.*, **107**, 8554–8560.
- Becke, A. D. (2000). *J. Chem. Phys.*, **112**, 4020–4026.
- Bekárek, V. (1983). *J. Chem. Soc., Perkin Trans.*, **2**, 1293–1296.
- Bell, R. P., Bascombe, K. N. and McCoubrey, J. C. (1956). *J. Chem. Soc.*, 1286–1291.

- Bell, R. P. (1941). *Acid-base catalysis*, Oxford University Press, London.
- Bell, R. P. (1973). *The proton in chemistry*, 2nd edn. Cornell University Press, Ithaca, New York.
- Bentley, T. W. and Roberts, K. (1985). *J. Org. Chem.*, **50**, 4821–4828.
- Bernasconi, C. F. (1992). *Adv. Phys. Org. Chem.*, **27**, 119–238.
- Berry, R. S., Rice, S. A., and Ross, J. (2000). *Physical chemistry*. Oxford University Press, New York and Oxford.
- Berson, J. A., Hamlet, Z., and Mueller, W. A. (1962). *J. Am. Chem. Soc.*, **84**, 297–304.
- Billmeyer, F. W., Jr. (1971). *Textbook of polymer science*, 2nd edn. Wiley-Interscience, New York, pp. 289, 358–364.
- Bjerrum, N. (1926). *Kgl.Danske Vidensk.Selskab.*, **7**, No. 9. See also Davies (1962), or Harned and Owen (1950).
- Blagoeva, I. B., Toteva, M. M., Ouarti, N., and Ruasse, M.-F. (2001). *J. Org. Chem.*, **66**(6), 2123–2130.
- Blandamer, M. J. (1977). In Gold, V. and Bethell, D., eds. *Adv. Phys. Org. Chem.*, **14**, Acad. Press, London. 203–343.
- Blandamer, M. J. and Burgess, J. (1982). *Pure Appl. Chem.*, **54**(12), 2285–2296.
- Blandamer, M. J., Scott, J. M. W., and Robertson, R. E. (1985). *Prog. Phys. Org. Chem.*, **15**, 149–196.
- Bloom, H. and Hastie, J. W. (1965). In Waddington, T. C., ed. *Non-aqueous solvent systems*. Academic Press, London, New York, p. 353ff.
- Bohme, D. K. (1984). In Almosta Ferreira, M. A., ed. *Ionic processes in the gas phase*, Reidel, Dordrecht.
- Bohme, D. K. and Mackay, G. I. (1981). *J. Am. Chem. Soc.*, **103**, 978–979.
- Boon, J., Levitsky, J., Pflug, J., and Wilkes, J. (1986). *J. Org. Chem.*, **51**, 480–483.
- Bordwell, F. G. (1988). *Acc. Chem. Res.*, **21**, 456–463.
- Born, M. (1920). *Z. Phys.*, **1**, 45–48.
- Born, M. and Green, H. S. (1949). *General Kinetic Theory of Liquids*. Cambridge University Press, Cambridge.
- Bosnich, B. (1967). *J. Am. Chem. Soc.*, **89**, 6143–6148.
- Bowden, K. and Cook, R. S. (1968). *J. Chem. Soc. (B)*, 1529–1533.
- Bowman, N. S., McCloud, G. T., Schweitzer, G. K. (1968) *J. Amer. Chem. Soc.*, **90**, 3848–3852.
- Brooker, L. G. S., Craig, A. C., Heseltine, D. W., Jenkins, P. W., and Lincoln, L. L. (1965). *J. Am. Chem. Soc.*, **87**, 2443–2450.
- Brownlee, R. T. C., Dayel, S. K., Lyle, J. L., Taft, R. W. (1972). *J. Am. Chem. Soc.*, **94**, 7208–7209.
- Brownstein, S. (1960). *Can. J. Chem.*, **38**, 1590–1596.
- Buncel, E., and Lawton, B. T. (1965). *Can. J. Chem.*, **43**, 862–875.
- Buncel, E., Symons, E. A., and Zabel, A. W. (1965). *Chem. Commun.*, 173–174.
- Buncel, E. (1975a). *Acc. Chem. Res.*, **8**, 132–139.
- Buncel, E. (1975b). *Carbanions. Mechanistic and isotopic aspects*, Elsevier, Amsterdam, p. 16.
- Buncel, E. (2000). *Can. J. Chem.*, **78**, 1251–1271.
- Buncel, E., Boone, C., and Joly, H. A. (1986). *Inorg. Chim. Acta*, **125**, 167–172.
- Buncel, E., Chuaqui, C., and Wilson, H. (1980). *J. Org. Chem.*, **45**, 3621–3626.
- Buncel, E., Chuaqui, C., and Wilson, H. (1982). *Int. J. Chem. Kinetics*, **14**, 823–837.
- Buncel, E., Davey, J. P., Jones, J. R., and Perring, K. D. (1990). *J. Chem. Soc., Perkin Trans.*, **2**, 169–173.
- Buncel, E. and Dust, J. M. (2003). *Carbanion Chemistry: structures and mechanisms*. American Chemical Society, Washington, DC, Oxford University Press.
- Buncel, E., Dust, J. M., and Terrier, F. (1995). *Chem. Rev.*, **95**, 2261–2280.

- Buncel, E. and Menon, B. C. (1979). *J. Org. Chem.*, **44**, 317–320.
- Buncel, E., Menon, B. C., and Colpa, J. P. (1979). *Can. J. Chem.*, **57**, 999–1005.
- Buncel, E. and Millington, J. P. (1965). *Can. J. Chem.*, **43**, 556–564.
- Buncel, E., Cannes, C., Chatrousse, A.P., and Terrier, F. (2002a). *J. Am. Chem. Soc.*, **124**, 8766–8767.
- Buncel, E., Onyido, I. (2002b). *J. Labelle. Cpd. Radiopharm.* **45**, 291–306.
- Buncel, E. and Rajagopal, S. (1989) *J. Org. Chem.*, **54**, 798–809.
- Buncel, E. and Rajagopal, S. (1990) *Acc. Chem. Res.*, **23**, 226–231.
- Buncel, E. and Rajagopal, S. (1991) *Dyes and Pigments*, **17**, 303.
- Buncel, E. and Symons, E. A. (1976). *J. Am. Chem. Soc.*, **98**, 656–660.
- Buncel, E. and Symons, E. A. (1981). In Bertini, I., Lunazzi, L., and Dei, A., eds. *Advances in solution chemistry*. Plenum Press, New York, pp. 355–371.
- Buncel, E. and Symons, E. A. (1986). In Zuckerman, J.J., ed. *Inorganic reactions and methods*, Vol. 1. VCH, Weinheim, pp. 69–75.
- Buncel, E., Symons, E. A., Dolman, D., and Stewart, R. (1970). *Can. J. Chem.*, **48**, 3354–3357.
- Buncel, E. and Wilson, H. (1977a). *Adv. Phys. Org. Chem.*, **14**, 133–202.
- Buncel, E. and Menon, B. (1977b). *J. Am. Chem. Soc.*, **99**, 4457–4461.
- Buncel, E. and Wilson, H. (1979). *Acc. Chem. Res.*, **12**, 42–48.
- Buncel, E., Wilson, H. (1980). *J. Chem. Educ.*, **57**, 629–633.
- Buncel, E., Wilson, H., and Chuaqui, C. (1982). *J. Am. Chem. Soc.*, **104**, 4896–4900.
- Buncel, E., Lee, C. C., eds. (1987). *Isotopes in Organic Chemistry*, Vol. 1. Isotopes in Molecular Rearrangements.
- Buncel, E., Saunders, W. H., eds. (1992). *Isotopes in Organic Chemistry*, vol. 8, ‘Heavy Atom Isotope Effects’, Elsevier, Amsterdam.
- Buncel, E., Park, K.-T., Dust, J.M., Manderville, R.A. (2003). *J. Am. Chem. Soc.* **125**, 5388–5392.
- Bunnell, J. F. and Olsen, F. P. (1966). *Can. J. Chem.*, **44**, 1899–1916, 1917–1931.
- Burgess, J. and Pelizzetti, E. (1992). *Prog. React. Kinet.*, **17**, 1–170.
- Burrell, H. (1955). *Interchem. Rev.*, **14**, 3–16, 31–46.
- Caldin, E. F. and Hasinoff, B. B. (1975). *J. Chem. Soc. Faraday Trans. I*, **71**, 515–527.
- Caldin, E. F. and Grant, M. W. (1973). *J. Chem. Soc. Faraday Trans. I*, **69**, 1648–1654.
- Cann, N. M. and Patey, G. N. (1997). *J. Chem. Phys.*, **106**, 8165–8195.
- Car, R. and Parrinello, M. (1985). *Phys. Rev. Lett.*, **55**, 2471–2474.
- Carey, F. A. (1996). *Organic chemistry*, 3rd edn. McGraw Hill, New York.
- Carroll, F. A. (1998). *Perspectives on structure and mechanism in organic chemistry*, Brooks/Cole Publishers, Pacific Grove.
- Carlson, R., Lundstedt, T., and Albano, C. (1985). *Acta Chem. Scand. B*, **39**, 79–91.
- Carmichael, H. (2000). *Chem. Britain*, Jan., 36–38.
- Catalán, J. (2001). In Wypych, G., ed. *Handbook of solvents*. ChemTec, Toronto, New York, pp. 583–616.
- Cerfontain, H. (1968). *Mechanistic aspects in aromatic sulfonation and desulfonation*. Wiley, New York.
- Chandler, D. and Andersen, H. C. (1972). *J. Chem. Phys.*, **57**, 1930–1937.
- Chandrasekhar, J. and Jorgensen, W. L. (1985). *J. Am. Chem. Soc.*, **107**, 2974–2975.
- Chapman, N. B. and Shorter, J., eds. (1972, 1978) *Advances in linear free energy relationships; correlation analysis in chemistry—recent advances*. Plenum, London.
- Chau, P. L., Forester, T. R., and Smith, W. (1996). *Mol. Phys.*, **89**, 1033–1055.
- Chauvin, Y., Mussman, L., and Olivier, H. (1995). *Angew. Chem. Int. Ed. Engl.*, **34**, 2698–2700.

- Chen, T., Hefter, G., and Marcus, Y. (2000). *J. Solution Chem.*, **29**, 201–216.
- Chum, H. L. and Osteryoung, R. A. (1981). In Inman D. and Lovering, D.G., eds. *Ionic Liquids*. Plenum, New York & London, pp. 407–423.
- Clark, R. J. and Brimm, E. O. (1965). *Inorg. Chem.*, **4**, 651–654.
- Claydon, J., Greeves, N., Warren, S., and Wothers, P. (2001). *Organic chemistry*. Oxford University Press, Oxford.
- Coetze, J. F. and Ritchie, C. D., eds. (1969, 1976). *Solute-solvent interactions*. Marcel Dekker, New York, London.
- Coetze, J. F. and Deshmukh, B. K. (1990) *Chem. Rev.*, **90**, 827–835.
- Collard, D. M., Jones, A. G., and Kriegel, R. M. (2001). *J. Chem. Educ.*, **78**, 70–72.
- Collins, C. J. and Bowman, N. S., eds. (1970). *Isotope Effects in Chemical Reactions*. Van Nostrand Reinhold, New York.
- Covington, A. K. and Newman, K. E., 1976. In Furter, W.F. ‘Thermodynamic behaviour of Electrolytes in Mixed Solvents’, *Adv. Chem. Ser.*, **155**, Am. Chem. Soc., Washington, 153–196.
- Cox, B. G. and Webster, K. C. (1936). *J. Chem. Soc.*, 1635–1637.
- Cox, B. G. (1994). *Modern liquid phase kinetics*. Oxford University Press, Oxford.
- Cox, B. G. (1973). *Ann. Rep. Chem. Soc. (A)*, **70**, 249–274.
- Cox, R. A. and Yates, K. (1981). *Can. J. Chem.*, **59**, 2116–2124.
- Cox, R. A. and Yates, K. (1983). *Can. J. Chem.*, **61**, 2225–2243.
- Cox, R. A. (1987). *Acc. Chem. Res.*, **20**, 27–31.
- Cox, R. A. (2000). *Adv. Phys. Org. Chem.*, **35**, 1–66.
- Cox, R. A., Krull, U. J., Thompson, M., and Yates, K. (1979). *Anal. Chim. Acta*, **106**, 51–57.
- Cox, R. A. and Yates, K. (1978). *J. Am. Chem. Soc.*, **100**, 3861–3867.
- Coxeter, H. S. M. (1961). *Introduction to geometry*. Wiley, New York and London, p. 128, Eqn. 8. 84.
- Cram, D. J., Rickborn, B., and Knox, G. R. (1960). *J. Am. Chem. Soc.*, **82**, 6412–6113.
- Cram, D. J. (1965). *Fundamentals of carbanion chemistry*. Academic Press, New York, Chapters 2–4.
- Cram, D. J. and Cram, J. M. (1978). *Acc. Chem. Res.*, **11**, 8–14.
- Davidson, E. R. and Feller, D. (1986). *Chem. Rev.*, **86**, 681–686.
- Davies, C. W. and James J. C. (1948). *Proc. Royal Soc.*, **195A**, 116–123.
- Davies, C. W. (1962). *Ion association*. Butterworths, London.
- de Rege, P. J. F., Gladyz, J. A., and Horváth, I. (1997). *Science*, **276**, 776–779.
- Debye, P. J. W. and Hückel, E. (1923). *Z. Phys.*, **24**, 185–206.
- Desrosiers, N. and Desnoyers, J. E. (1976). *Can. J. Chem.*, **54**, 3800–3808.
- Dewar, M. J. S. and Storch, D. M. (1989) *J. Chem. Soc. Perkin Trans.*, **2**, 877–885.
- Dewar, M. J. S. and Storch, D. M. (1985) *J. Chem. Soc. Chem. Commun.*, 94–96.
- Dewar, M. J. S. and Thiel, W. J. (1977). *J. Am. Chem. Soc.*, **99**, 4899–4906, 4907–4917.
- Dewar, M. J. S. (1992). In Seeman, J.I., ed. *A semiempirical life*. Am. Chem. Soc., Washington.
- Dewar, M. J. S., Zoebisch, E. G., Healy, E. F., and Stewart, J. J. P. (1985). *J. Am. Chem. Soc.*, **107**, 3902–3909.
- Dimroth, K., Reichardt, C., Siepmann, T., and Bohlmann, F. (1963). *Justus Liebigs Ann. Chem.*, **661**, 1–37.
- Dimroth, K. and Reichardt C. (1969). *Justus Liebigs Ann. Chem.*, **727**, 93–105.
- Dong, D. C. and Winnik, M. A. (1984) *Can. J. Chem.*, **62**, 2560–2565.
- Dove, M. F. A. and Clifford, A. F. (1971). In Jander, G., Spandau, H., Addison, C.C., eds. *Chemie in nichtwässrigen Lösungsmitteln*. Vol. I, Part 1. pp. 119–300 (in Engl.). Vieweg, Braunschweig; Pergamon, Oxford.

- Doye, J. P. K. and Wales, D. J. (1999). *Phys. Rev. B*, **59**, 2292–2300.
- Drago, R. S., Ferris, D. C., and Wong, N. (1990). *J. Am. Chem. Soc.*, **112**, 8953–8961.
- Drago, R. S. (1980). *Pure Appl. Chem.*, **52**, 2261–2274.
- Drago, R. S. (1992). *J. Chem. Soc. Perkin Trans.*, **2**, 1827–1837.
- Drago, R. S. and Kabler, R. A. (1972). *Inorg. Chem.*, **11**, 3144–3145.
- Drago, R. S., Wong, N., and Ferris, D. C. (1991). *J. Am. Chem. Soc.*, **113**, 1970–1977.
- Drago, R. S. and Wayland, B. B. (1965). *J. Am. Chem. Soc.*, **87**, 3571–3577.
- Drljaca, A., Hubbard, C. D., van Eldrik, R., Asano, T., Basilevsky, M. V., and le Noble, W. J. (1998). *Chem. Rev.*, **98**, 2167–2289.
- Drougard, Y. and Decroocq, D. (1969). *Bull. Soc. Chim. Fr.*, 2972–2983.
- Dubois, J.-E. and Bienvenue, A. (1968) *J. Chim. phys.*, **65**, 1259–1265.
- Dunn, W. J. III., Wold, S., Edlund, U., Hellberg, S., and Gasteiger, J. (1984). *Quantitative structure-activity relationships*, **3**, 1313–1317.
- Dunn, E. J. and Buncel, E. (1989). *Can. J. Chem.*, **67**, 1440–1448.
- Durrell, S. R. and Wallqvist, A. (1996). *Biophys. J.*, **71**, 1696–1706.
- Dutkiewicz, M. (1990). *J. Chem. Soc., Faraday Trans.*, **86**, 2237–2241.
- Dye, J. L. (1964). In *Solutions métal-ammoniac: propriétés physicochimiques*. pp. 137–145. Univ. Cath. Lille; Benjamin, New York.
- Dyson, P. J., Ellis, D. J., Parker, D. G., and Welton, M. T. (1999). *Chem. Commun.*, (1), 25–26.
- Džidić, I. and Kebarle, P. (1970). *J. Phys. Chem.*, **74**, 1466–1474.
- Earle, M. J., McCormac, P. B. and Seddon, K. R. (1998). *Chem. Commun.*, 2245–2246.
- Edwards, J. O. (1954). *J. Am. Chem. Soc.*, **76**, 1540–1547.
- Edwards, J. O. (1956) *J. Am. Chem. Soc.*, **78**, 1819–1820.
- Eigen, M. and Tamm, K. (1962). *Z. Electrochem.*, **66**, 107–121.
- Eisfeld, W. and Regitz, M. (1996). *J. Am. Chem. Soc.*, **118**, 11918–11926.
- El Hosary, A. A., Kerridge, D. H., and Shams El Din, A. M. (1981) In Inman D. and Lovering, D.G., eds. *Ionic liquids*. Plenum, New York & London, pp. 339–362.
- Eliasson, B., Johnels, D., Wold, S., Edlund, U., and Sjöström, M. (1982). *Acta Chim. Scand.*, **B**, **36**, 155–164.
- Eliel, E. L. and Hofer, O. (1973). *J. Am. Chem. Soc.*, **95**, 8041–8045.
- Eliel, E. E., Wilen, S. H., and Mander, L. N. (1994). *Stereochemistry of organic compounds*. Wiley-Interscience, New York, pp. 416–421.
- Ellis, B., Keim, W., and Wasserscheid, P. (1999). *Chem. Commun.*, **4**, 337–338.
- Erdey-Grúz, T. (1974). *Transport phenomena in aqueous solutions*, Halstead (Wiley), New York.
- Étard, A. (1881). *Ann. Chim. Phys.*, **5**, **22**, 218–286.
- Evans, M. G. and Polanyi, M. (1935). *Trans. Faraday Soc.*, **31**, 875–894.
- Ewald, P. (1921). *Ann. Phys.*, **64**, 253–287.
- Eyring, H. (1935). *J. Chem. Phys.*, **3**, 107–115.
- Fabre, P.-L., Devynck, J., and Trémillon, B. (1982). *Chem. Rev.*, **82**, 591–614.
- Fainberg, A. S. and Winstein, S. (1956). *J. Am. Chem. Soc.*, **78**, 2770–2777.
- Fajans, K. (1923). See (1965) *Chem. Eng. News*, **43**, 96.
- Fang, Y. R., Lai, Z. G. and Westaway, K. C. (1998). *Can. J. Chem.*, **76**, 758.
- Fannin, A. A., Jr., Floreani, D. A., King, L. A., Landers, J. S., Piersma, B. J., Stech, D. J., Vaughn, R. L., Wilkes, J. S., and Williams, J. L.. (1984). *J. Phys. Chem.*, **88**, 2614–2621.
- Feng, D.-F. and Kevan, L. (1980). *Chem. Rev.*, **80**, 1–20.
- Fernelius, W. C. and Bowman, G. E. (1940). *Chem. Rev.*, **26**, 3–48.

- Flood, H., Förland, T., and Motzfeldt, K. (1952). *Acta Chim. Scand.*, **6**, 257–269.
- Foresman, J. B. and Frisch, A.E. (1993). *Exploring chemistry with electronic structure methods: A guide to using Gaussian*. Gaussian, Inc., Pittsburgh.
- Fowler, H. W., Fowler, F. G., and Sykes, J. B. (1976). *Concise oxford dictionary*, 6th edn. Oxford University Press, Oxford.
- Freemantle, M. (1998). *Chem. Eng. News*. 30 March 30, 32–37; (2000). *Chem. Eng. News*, 15 May, 37–50; (2001). *Chem. Eng. News*, 1 Jan., 21–25.
- Frémy, M. E. (1856). *Ann. Chim. Phys.*, **47**, 5–50.
- Fuoss R. M. and Krauss, C. A. (1933). *J. Am. Chem. Soc.*, **55**, 1019–1028.
- Gielen, M. and Nasielski, J. (1967). *J. Organomet. Chem.*, **7**, 273–280.
- Gillespie, R. J., Peel, T. E., and Robinson, E. A. (1971) *J. Am. Chem. Soc.*, **93**, 5083–5087.
- Gillespie, R. J. and Peel, T. E. (1973) *J. Am. Chem. Soc.*, **95**, 5173–5178.
- Gillespie, R. J. and Robinson, E. A. (1965). In Waddington, T.C., ed. *Non-aqueous solvent systems*. Academic Press, London, p. 117.
- Godfrey, M. B. (1972). *CHEMTECH*, 359–363.
- Gold, V. (1976). *J. Chem. Soc., Perkin Trans.*, **2**, 1531–1532.
- Grant, G. H. and Richards, W. G. (1995). *Computational chemistry*. Oxford University Press, Oxford, New York, Toronto.
- Gronwall, T. H., LaMer, V. K., and Sandved, K. (1928). *Z. Phys.*, **29**, 358–393.
- Grunwald, E. and Winstein, S. (1948). *J. Am. Chem. Soc.*, **70**, 841–854.
- Guillot, B., Guissani, Y., and Bratos, S. (1991). *J. Chem. Phys.*, **95**, 3643–3648.
- Guillot, B. and Guissani, Y. (1993). *J. Chem. Phys.*, **99**, 8075–8094.
- Guthrie, J.P. (1998). *J. Am. Chem. Soc.*, **120**, 1688–1694
- Guthrie, J.P. and Guo, J. (1996). *J. Am. Chem. Soc.*, **118**, 11472–11487
- Guterman, L. (1999). *Chemistry* (Summer), pp. 12–14. Am. Chem. Soc., Washington.
- Gutmann, V. (1967). *Coord. Chem. Rev.*, **2**, 239–256.
- Gutmann, V. (1969) *Chimia*, **23**, 285–292.
- Gutmann, V. (1968). *Coordination chemistry in non-aqueous solutions* Springer-Verlag, Vienna & New York.
- Gutmann, V. (1976) *Electrochim. Acta* **21**, 661–670.
- Gutmann, V. and Scherhauser, A. (1968). *Monatsh. Chem.*, **99**, 335–339.
- Gutmann, V. and Wychera, E. (1966). *Inorg. Nucl. Chem. Lett.*, **2**, 257–260.
- Haberfield, P. (1971). *J. Am. Chem. Soc.*, **93**, 2091–2093.
- Haberfield, P., Lux, M. S., and Rosen, D. (1977). *J. Am. Chem. Soc.*, **99**, 6828–6831.
- Hall, N. F. and Conant, J. B. (1927). *J. Am. Chem. Soc.*, **49**, 3047–3061; 3062–3070.
- Hammett, L. P. (1970). *Physical organic chemistry*, 2nd edn. McGraw-Hill, New York.
- Hammett, L. P. and Deyrup, (1932). *J. Am. Chem. Soc.*, **54**, 2721–2739.
- Hammett, L. P. (1937). *J. Am. Chem. Soc.*, **59**, 96–103.
- Hansch, C. (1969). *Acc. Chem. Res.*, **2**, 232–239.
- Hansen, J. P. and McDonald, I. R. (1986). *Theory of simple liquids*. Academic Press (Harcourt Brace Jovanovich) London.
- Hantzsch, A. and Caldwell, K. S. (1908). *Z. Phys. Chemie*, **61**, 227–240.
- Hao, C. and March, R. E. (2001). *J. Mass Spect.*, **36**, 79–96.
- Hao, C., March, R. E., Croley, T. R., Smith, J. C., and Rafferty, S. P. (2001). *J. Mass Spect.*, **36**, 79–96.
- Harris, J. M., Shafer, S. G., Moffatt, J. R. and Becker, A. R. (1979). *J. Am. Chem. Soc.*, **101**, 3295–3300.
- Hehre, W. J., Radom, L., Schleyer, P. v. R., and Pople, J. A. (1986). *Ab initio molecular orbital theory*. Wiley, New York.

- Heirl, P. M., Ahrens, A. F., Henchman, M. J., Viggiano, A. A., and Paulson, J. F. (1988). *Faraday Discuss. Chem. Soc.*, **85**, 37–51.
- Hildebrand, J. H. and Scott, R. L. (1950). *The solubility of nonelectrolytes*, 3rd edn. Reinhold, New York.
- Hildebrand, J. H. and Carter, J. M. (1930). *Proc. Nat. Acad. Sci.*, **16**, 285–288.
- Hildebrand, J. H. and Scott, R. L. (1962). *Regular solutions*, Prentice-Hall, Englewood Cliffs.
- Hinton, J. F. and Amis, E. S. (1971). *Chem. Rev.*, **71**, 627–674.
- Hogen-Esch, T. E. and Smid, J. (1966). *J. Am. Chem. Soc.*, **88**, 307–318; 318–324.
- Hohenberg, P. and Kohn, W. (1964). *Phys. Rev.*, **136B**, 864–871.
- House, H. O. (1972). *Modern synthetic reactions*, Benjamin, Menlo Park, CA.
- Howarth, J., Hanlon, K., Fayne, D., and McCormac, P. (1997). *Tetrahedron Lett.*, **38**, 3097–3100.
- Hughes, E. D. and Ingold, C. K. (1935). *J. Chem. Soc.*, 244–255.
- Huheey, J. A., Keiter, E. A., and Keiter, R. L. (1993). *Inorganic chemistry*, 4th edn. HarperCollins College Publishers, New York.
- Hunt, J. P. (1963). *Metal ions in solution*. Benjamin, New York, pp. 14–17, 27–35.
- Hurley, F. H. and Weir, J. P. (1951). *J. Electrochem. Soc.*, **98**, 203–206.
- Ingold, C. K. (1969). *Structure and mechanism in organic chemistry*, 2nd edn. Cornell University Press, Ithaca, New York.
- Isaacs, N. S. (1984). In Buncel, E. and Lee, C.C., eds. *Isotopes in organic chemistry*, Vol. 6, Elsevier, Amsterdam.
- Jander, J. (1966). *Anorganische und allgemeine Chemie in flüssigem Ammoniak*. Vol. I, part I of Jander, G., Spandau, H. and Addison, C.C., eds. *Chemie in nichtwässrigen ionisierenden Lösungsmitteln*. Vieweg, Braunschweig; Wiley/Interscience, New York and London.
- Jander, J. and Lafrenz, Ch. (1970). *Ionizing solvents*. Verlag Chemie, Weinheim.
- Janowski, A., Turowska-Tyrk, I., and Wrona, P. K. (1985). *J. Chem. Soc., Perkin Trans.*, **2**, 821–825.
- Jencks, W.P. In 'Nucleophilicity', Harris, J.M. and McManus, S.P., eds. (1987). *ACS Advances in Chemistry Series*, American Chemical Society, Washington D.C., pp. 155–167 and references therein.
- Jencks, D.A. and Jencks, W.P. (1977). *J. Am. Chem. Soc.*, **99**, 7848.
- Jencks, W.P. (1969). *Catalysis in Chemistry and Enzymology*, McGraw-Hill, New York.
- Johnson, D. E. (1998). *Applied multivariate methods for data analysts*. Brooks/Cole, Pacific Grove, Calif.
- Jolly, W. L. (1970). *The synthesis and characterization of inorganic compounds*. Prentice-Hall, Englewood Cliffs.
- Jones, J.R. (1973). *Prog. Reaction Kinetics*, **7**, 1.
- Jorgensen, C. K. (1964). *Inorg. Chem.*, **3**, 1201–1202.
- Jorgensen, W. L. (1982). *Chem. Phys. Lett.*, **92**, 405–410.
- Jungers, J. C., Sajus, L., de Aguirre, I., and Decrocq, D. (1968). *L'Analyse cinétique de la transformation chimique*. Technip, Paris.
- Kamlet, M. J., Abboud, J.-L. M., Abraham, M. H., and Taft, R. W. (1983). *J. Org. Chem.*, **48**, 2877–2887.
- Kamlet, M. J., Minesinger, R. R., and Gilligan, W. H. (1972). *J. Am. Chem. Soc.*, **94**, 4744–4746.
- Kamlet, M. J. and Taft, R. W. (1979). *J. Chem. Soc., Perkin Trans.*, **2**, 337–341, 349–356.
- Kamlet, M. J. and Taft, R. W. (1976). *J. Am. Chem. Soc.*, **98**, 377–383; 2886–2894.

- Kamlet, M. J., Jones, M. E., and Taft, R. W. (1979). *J. Chem. Soc. Perkin Trans.*, **2**, 342–348.
- Kamlet, M. J., Abboud, J.-L. M., and Taft, R. W. (1981). *Prog. Phys. Org. Chem.*, **13**, 485–630.
- Kamlet, M. J., Abboud, J.-L. M., and Taft, R. W. (1977) *J. Am. Chem. Soc.*, **99**, 6027–6038.
- Kamlet, M. J., Doherty, R. M., Abraham, M. H., Carr, P. W., Doherty R. F., and Taft, R. W. (1987). *J. Phys. Chem.*, **91**, 1996–2004.
- Kebarle, P. (1972). In Szwarc, M., ed. *Ions and ion pairs in organic reactions*, Vol. 1, Wiley, New York, Chapter 2.
- Kerridge, D. H. (1978). In Lagowski, J. J., ed. *The chemistry of nonaqueous solvents*, Vol. VB., Academic Press, New York, pp. 269–329.
- Kessler, Y. M., Puhovski, Y. P., Kiselev, M. G., and Vaisman, I. I. (1994) In Mamantov, G. and Popov, A. I., eds. *Chemistry of nonaqueous solutions: Current progress*, pp. 307–373. VCH, New York, Weinheim, Cambridge.
- Kettle, S. F. A. (1996). *Physical inorganic chemistry*. pp. 331–335. Spektrum, Oxford.
- Kier, L. B. (1981). *J. Pharm. Sci.*, **70**, 930–933.
- Kilpatrick, M. and Jones, J. G. (1967). In Lagowski, J. J., ed. *The chemistry of nonaqueous solvents*, Vol. II., pp. 43–99. Academic Press, New York.
- Kirkwood, J. G. (1934). *J. Chem. Phys.*, **2**, 351–361.
- Kleinberg, R. and Brewer, P. (2001). *American Scientist*, **89**, 244–251.
- Klemperer, W. (2001). *Science*, **293**, 815–816.
- Klopman, G. (1968). *J. Am. Chem. Soc.*, **90**, 223–234.
- Knauer, B. R. and Napier, J. J. (1974). *J. Am. Chem. Soc.*, **98**, 4395–4400.
- Koch, W. and Holthausen, M. C. (2001). A chemist's guide to density functional theory. FVA-Frankfurter Verlag GmbH; Wiley, New York.
- Koga, K., Tanaka, H., and Zeng, X. C. (1996). *J. Phys. Chem.*, **100**, 16711–16719.
- Kohn, W. and Sham, L. J. (1965). *Phys. Rev.*, **140** A, 1133–1138.
- Koo, I. S., An, S. K., Yang, K., Koh, H. J., Choi, M. H. and Lee, I. (2001). *Bull. Korean Chem. Soc.*, **22**(8), 842–846.
- Koppel, I. A. and Paju, A. (1974) *Organic reactivity (USSR)*. **11**, 121.
- Koppel, I. A. and Pal'm, V. A. (1972). In Chapman, N.B. and Shorter, J., eds. *Advances in linear free energy relationships*. Plenum, New York & London, pp. 203ff.\*
- Kosower, E. M. (1958). *J. Am. Chem. Soc.*, **80**, 3253–3260.
- Kosower, E. M. (1968). *An introduction to physical organic chemistry*. Wiley, New York.
- Kováts, E. sz. (1965). *Adv. Chromatogr.*, **1**, 229–247
- Kresge, A. J., More O'Ferrall, R. A. and Powell, M. F. (1987). In Buncel, E. and Lee, C. C., eds. *Isotopes in organic chemistry*, Elsevier, Vol. 7, pp 177–273.
- Kumar, A. (2001). *Chem. Rev.*, **101**, 1–19.
- Kusalik, P. G. and Svishchev, I. (1994). *Science*, **265**, 1219–1221.
- Kyba, E. P., Koga, K., Sousa, L. R., Siegel, M. G., and Cram, D. J. (1973). *J. Am. Chem. Soc.*, **95**, 2692–2693.
- Lagowski, J. J. and Moczygemb, G. A. (1967). In Lagowski, J. J., ed. *The chemistry of nonaqueous Solvents*, Vol. II., Academic Press, New York, pp. 319–371.
- Lagowski, J. J. (1971). *Pure Appl. Chem.*, **25**, 429–464.
- Laidler, K. J. and Meiser, J. M. (1995). *Physical chemistry*, 2nd edn. Houghton Mifflin, Boston.
- Laidler, K. J. (1987). *Chemical kinetics*, 3rd edn. Harper and Row, New York.
- Lander, J. and Lafrenz, Ch. (1970). *Ionizing solvents*, Wiley, Verlag Chemie, Weinheim, p. 139.

- Langford, C. H. and Tong, J. P. K. (1977). *Acc. Chem. Res.*, **10**, 258–264.
- Langhals, H. (1982a). *Nouv. Jour. Chim.*, **6**, 265–267.
- Langhals, H. (1982b) *Angew. Chem. (Int Edn., Engl.)* B21, 724–733.
- Latimer, W. M., Pitzer K. S., and Slansky, C. M. (1939). *J. Chem. Phys.*, **7**, 108–111.
- Lau, Y. K., Ikuta, S., and Kebarle, P. (1982). *J. Am. Chem. Soc.*, **104**, 1462–1469; see also Kebarle, P. (1972), In Szwarc, M., ed. *Ions and ion Pairs in organic reactions*, Wiley-Interscience, New York, 51–83.
- Leach, A. R. (1996). *Molecular modelling: principles and applications*. Addison Wesley Longman Limited, Harlow.
- Leo, A. (1983) *J. Chem. Soc. Perkin Trans.*, **2**, 825–838.
- Lewars, E. G. (2003). *Computational Chemistry*. Kluwer Academic Publishers, Boston, 388–389.
- Levine, I. N. (2000). *Quantum chemistry*, 5th edn. Prentice Hall, Englewood Cliffs, NJ.
- Lux, H. (1939). *Z. Elektrochem.*, **45**, 303–309.
- Mackay, D., Shiu, W. Y., and Ma, K. C. (1992). *Illustrated handbook of physical-chemical properties and environmental fate of organic chemicals*. Lewis, Boca Raton.
- Madan, B. and Sharp, K. (1996). *J. Phys. Chem.*, **100**, 7714–7721.
- Maksimović, Z. B., Reichardt, C., and Spirić, A. Z. (1974). *Z. Anal. Chem.*, **270**, 100–104.
- Malinowski, E. R. and Howery, D. G. (1980). *Factor analysis in chemistry*. Wiley, New York; reprinted 1989 by Krieger, Malabar (Fla.).
- Manuta, D. M. and Lees, A. J. (1986). *Inorg. Chem.*, **25**, 3212–3218.
- Marcus, Y. (1985). *Ion solvation*. Wiley, Chichester.
- Marcus, Y. (1998). *The properties of solvents*. Wiley, Chichester.
- Marcus, Y. (1987). *J. phys. chem.*, **91**, 4422–4428.
- Maria, P.-C. and Gal, J.-F. (1985). *J. phys. chem.*, **89**, 1296–1304.
- Maria, P.-C., Gal, J.-F., de Franceschi, J., and Fargin, E. (1987). *J. Am. Chem. Soc.*, **109**, 483–492.
- Marziano, N. C., Traverso, P. G., Tomasin, A., and Passerini, R. C. (1977). *J. Chem. Soc., Perkin Trans.*, **2**, 309–313.
- Marziano, N. C., Cimino, G. M., and Passerini, R. C. (1973). *J. Chem. Soc., Perkin Trans.*, **2**, 1915–1922.
- Mashima, M., McIver, R. R., Taft, R. W., Bordwell, F. G., and Olmstead, W. N. (1984). *J. Am. Chem. Soc.*, **106**, 2717–2718.
- Mattson, A. (2002). *Science*, **298**, 759–760.
- Matubayasi, N. and Levy, R. M. (1996). *J. Phys. Chem.*, **100**, 2681–2688.
- Matyushov, D. V., Schmid, R., and Ladanyi, B. M. (1997). *J. Phys. Chem.*, **101**, 1035–1050.
- Maurois, A. (1927). *Les discours du Dr. O'Grady*. Trans. Thurfrida Wake. (1965) edn. combined with *The Silence of Colonel Bramble*, The Bodley Head, London, p. 176.
- Mayer, U., Gerger, W., and Gutmann, V. (1977). *Monatsh. Chem.*, **108**, 489–498.
- Mayer, U., Gutmann, V., and Gerger, W. (1975). *Monatsh. Chem.*, **106**, 1235–1257.
- Melander, L. and Saunders, W. H. (1980). *Reaction rates of isotopic molecules*. Wiley, New York.
- Meng, E. C. and Kollman, P. A. (1996). *J. Phys. Chem.*, **100**, 11460–11470.
- Metropolis, N., Rosenbluth, A. W., Rosenbluth, M. N., Teller, A. H., and Teller, E. (1953). *J. Chem. Phys.*, **21**, 1087–1092.
- Meyer, K. H. and Hopff, H. (1921). *Ber. Deutsche Chem. Ges.*, **54**, 579–580.

- Miertus, S., Scrocco, E., and Tomasi, J. (1981). *Chem. Phys.*, **55**, 117–129.
- Mitchell, S. A. (1992). In Fontijn, ed. *Gas-phase metal reactions*, A. Elsevier, Amsterdam, pp. 227–252.
- More O'Ferrall, R. A. (1970). *J. Chem. Soc. B.*, 274.
- More O'Ferrall, R. A., Koeppel, G. W. and Kresge, A. J. (1971). *J. Amer. Chem. Soc.*, **93**, 9–20.
- Møller, C. and Plesset, M. S. (1934). *Phys. Rev.*, **46**, 618–622.
- Moore, J. W. and Pearson, R. G. (1981). *Kinetics and mechanism*, 3rd edn. Wiley, New York.
- Moore, W. J. (1972). *Physical chemistry*, 4th edn. Prentice-Hall, Englewood Cliffs, p. 571.
- Morrison, R. T. and Boyd, R. N. (1992). *Organic Chemistry*, 6th edn. Prentice-Hall, Englewood Cliffs, NJ.
- Mu, L., Drago, R. S. and Richardson, D. E. (1998). *J. Chem. Soc. Perkin Trans.*, **2**, 159–167.
- Mukerjee, P., Ramachandran, C., and Pyter, R. A. (1982). *J. Phys. Chem.*, **86**, 3189–3197.
- Nash, O. (1938). "Where There's a Will, There's Velleity". In *I'm a stranger here myself*, Little, Brown & Co., Boston.
- Némethy, G. and Scheraga, H. A. (1962). *J. Chem. Phys.*, **36**, 3401–3417.
- Newton, M. D. (1997). *J. Chem. Phys.*, **67**, 5535–5546.
- Nigretto, J.-M. and Jozefowicz, M. (1978). In Lagowski, J. J., ed. *The chemistry of nonaqueous solvents*, vol. VA., Academic Press, New York, pp. 179–250.
- Oh, Y. H., Jang, G. G., Lim, G. T. and Ryu, Z. H. (2002). *Bull. Korean Chem. Soc.*, **23**, 1089–1096.
- Okazaki, S., Nakanishi, K., Touhara, H., and Adachi, Y. (1979). *J. Chem. Phys.*, **71**, 2421–2429.
- Okazaki, S., Nakanishi, K., Touhara, H., Watanabi, N., and Adachi, Y. (1981). *J. Chem. Phys.*, **74**, 5863–5871.
- Olah, G. A., Prakash, G. K. S., and Sommer, J. (1985). *Superacids*. Wiley, New York.
- Onsager, L. (1936). *J. Am. Chem. Soc.*, **58**, 1486–1493.
- Oshima, T. and Nagai, T. (1985). *Tetrahedron Lett.*, **26**, 4785–4788.
- Parker, A. J. (1962). *Quart. Rev. (London)*, **16**, 163–187.
- Parker, A. J. (1967). *Adv. Phys. Org. Chem.*, **5**, 173–235.
- Parker, A. J. (1969). *Chem. Rev.*, **69**, 1–32.
- Passerini, R., Marziano, N. C., and Traverso, P. G. (1975). *Gazz. Chim. Ital.*, **105**, 901–906.
- Peacock, S. C. and Cram, D. J. (1976). *J. Chem. Soc. Chem. Commun.*, 282–284.
- Pearson, R. G., ed. (1973). *Hard and soft acids and bases*. Dowden, Hutchinson & Ross, Stroudsberg, PA.
- Pearson, R. G. (1963). *J. Am. Chem. Soc.*, **85**, 3533–3539.
- Pearson, R. G. (1988). *Inorg. Chem.*, **27**, 734–741.
- Pellerite, M. J. and Brauman, J. I. (1980). In E. Bunzel and T. Durst, eds., *Comprehensive carbanion chemistry*, vol. 5A, Elsevier, Amsterdam.
- Percus, J. K. and Yevick, G. J. (1958). *Phys. Rev.*, **110**, 1–13.
- Persson, I., Sandström, M., and Goggin, P. L. (1987). *Inorg. Chim. Acta*, **129**, 183–197.
- Pettybridge, A. D. and Prue, J. E. (1972). *Prog. Inorg. Chem.*, **17**, 327–390.
- Pine, S. H. (1987). *Organic chemistry*, 5th edn. McGraw-Hill, New York, etc.
- Plešek, J. and Heřmánek, S. (1968). Trans. Mayer, K. *Sodium hydride: its use in the laboratory and in technology*. CRC Press, Cleveland.
- Poos, G. I., Arth, G. E., Beyler, R. E., and Sarett, L. H. (1953). *J. Am. Chem. Soc.*, **75**, 422–429.

- Pourbaix, M. J. N. (1949). *Thermodynamics of dilute aqueous solutions*. Arnold, London.
- Pourbaix, M. J. N., Van Muylder, J., and de Zhoukov, N. (1963). *Atlas d'Equilibres électroniques à 25 °C*. Gauthier-Villars, Paris.
- Pregel, M. J., Dunn, E. J., and Buncel, E. (1990). *Can. J. Chem.*, **68**, 1846–1858.
- Pregel, M. J., Dunn, E. J., Negelkerke, R., Thatcher, G. R. J., and Buncel, E. (1995). *Chem. Soc. Rev.*, **24**, 449–455.
- Pregel, M. J., Dunn, E. J., and Buncel, E. (1991). *J. Am. Chem. Soc.*, **113**, 3545–3550.
- Rabinowitch, E. and Wood, W. C. (1936). *Trans. Faraday Soc.*, **32**, 1381–1387.
- Ràfols, C., Rosés, M., and Bosch, E. (1997). *J. Chem. Soc., Perkin Trans.*, **2**, 234–248.
- Rahimi, A. K. and Popov, A. I. (1976). *Inorg. Nucl. Chem. Lett.*, **12**, 703–707.
- Rau, H. (1983). *Chem. Rev.*, **83**, 535–547.
- Rauhut, G., Clark, T., and Steinke, T. (1993). *J. Am. Chem. Soc.*, **115**, 9174–9181.
- Reichardt, C. (1994). *Chem. Rev.*, **94**, 2319–2358.
- Reichardt, C. (1988). *Solvents and solvent effects in organic chemistry*, 2nd edn. VCH, Weinheim.
- Reichardt, C. (2003). *Solvents and solvent effects in organic chemistry*, 3rd edn. Wiley-VCH, Weinheim.
- Reichardt, C. (1971). *Justus Liebigs Ann. Chem.*, **752**, 64–67.
- Reichardt, C. and Harbusch-Görnert, E. (1983). *Justus Liebigs Ann. Chem.*, **727**, 721–743.
- Reichardt, C., Löbbecke, S., Mehranpour, A. M., and Schäfer, G. (1998). *Can. J. Chem.*, **76**, 686–694.
- Richard, J. P. (1995). *Tetrahedron*, **51**, 1535.
- Ritchie, C. D. (1969). In Coetzee J.F. and Ritchie, C.D., eds. *Solute-solvent interactions*. Marcel Dekker, New York & London, Chapter 4.
- Robinson, R. A. and Stokes, R. H. (1959). *Electrolyte solutions*. Butterworths, London.
- Röllgen, F. W., Bramer-Wegner, E., and Buttering, L. (1984). *J. Phys. Colloq.*, **45** (Suppl. 12), C9.
- Scatchard, G. (1931). *Chem. Rev.*, **8**, 321–333.
- Scatchard, G. (1932). *Chem. Rev.*, **10**, 229–240.
- Schön, I. (1984). *Chem. Rev.*, **84**, 287–297.
- Scriven, E. F. V., Toomey, J. E., and Murugan, R. (1994). In Kirk-Othmer, *Encyclopedia of chemical technology*, 4th edn., v. 20, pp. 641–679.
- Searles, S. K. and Kebarle, P. (1969). *Can. J. Chem.*, **47**, 2619–2627.
- Shafirovitch, V., Dourandin, A. and Geacintov, N. E. (2001). *J. Phys. Chem. B*, **105**, 8431–8435.
- Shaik, S. S., Schlegel, H. B., and Wolfe, S. (1992). *Theoretical aspects of physical organic chemistry: the S<sub>N</sub>2 mechanism*. Wiley, New York.
- Smith, M. B. and March, J. (2001). *March's Advanced Organic Chemistry*, Wiley, New York, etc.
- Simkin, B. Ya., and Sheikhet, I. I. (1995). In T. J. Kemp, ed. *Quantum chemical and statistical theory of solutions: a computational approach*. Engl. Ed. Ellis Horwood, London.
- Sjöström, M. and Wold, S. (1981). *J. Chem. Soc. Perkin Trans.*, **2**, 104–109.
- Skoog, D. A., West D. M., and Holler, F. J. (1989). *Fundamentals of Analytical Chemistry*, Saunders, New York, pp. 124–130.
- Smith, H. (1963). In *Organic reactions in liquid ammonia*. Vol. I, part 2 of Jander, G., Spandau, H., Addison, C.C., eds. *Chemie in nichtwäßrigen ionisierenden Lösungsmitteln*. Vieweg, Braunschweig; Wiley/Interscience, New York and London.

- Smith, R. A. (1994). In Kirk-Othmer, *Encyclopedia of chemical technology*, 4th edn. Vol. 11, pp. 355–376.
- Smithson, J. M. and Williams, R. J. P. (1958). *J. Chem. Soc.*, 457.
- Solomons, G. and Fryhle, C. (2000). *Organic chemistry*, 7th edn. Wiley, New York.
- Song, C. E., Shim, W. H., Roh, E. J., and Choi, J. H. (2000). *Chem. Commun.*, **17**, 1695–1696.
- Song, C. E., Shim, W. H., Roh, E. J., Lee, S., and Choi, J. H. (2001). *Chem. Commun.*, (12), 1122–1123.
- Stairs, R. A. (1957). *J. Chem. Phys.*, **27**, 1431–1432.
- Stairs, R. A. (1962). *Can. J. Chem.*, **40**, 1656–1659.
- Stairs, R. A. (1976). In Furter, W. F., "Thermodynamic Behaviour of Electrolytes in Mixed Solvents", *Adv. in Chem. Ser.*, **155**, Am. Chem. Soc., Washington, 332–342.
- Stairs, R. A. (1978) *Chem. Eng. News*, 5 June, p. 36 (letter).
- Stairs, R. A. (1979). In Furter, W. F. "Thermodynamic Behaviour of Electrolytes in Mixed Solvents-II", *Adv. in Chem. Ser.*, **177**, Am. Chem. Soc., Washington, 167–176.
- Stairs, R. A. (1983). *Chem. 13 News* (Univ. of Waterloo, Canada). Oct., pp. 11–12.
- Stevenson, C. D., Fico, R. M. Jr., and Brown, E. C. (1998). *J. Phys. Chem. B*, **102**, 2841–2844.
- Stewart, R. (1985). *The proton: applications to organic chemistry*. Academic Press, Orlando.
- Stillinger, F. H. and Rahman, A. (1974). *J. Chem. Phys.*, **60**, 1545–1557.
- Strehlow, H. and Schneider, H. (1969). *J. Chim. Phys.*, **66**, 118–123.
- Strehlow, H. and Schneider, H. (1971). *Pure Appl. Chem.*, **25**, 327–344.
- Streitwieser, A., Heathcock, C. H., and Kosower, E. M. (1992). *Introduction to organic chemistry*. Macmillan, New York.
- Suarez, P. A. Z., Dullius, J. E. L., Einloft, S., de Souza, R. F., and Dupont, J. (1997). *Inorg. Chim. Acta*, **255**, 207–209.
- Svishchev, I., Kusalik, P. G., Wang, S., and Boyd, R. J. (1996). *J. Chem. Phys.*, **105**, 4742–4750.
- Swain, C. G., Swain, M. S., Powell, A. L., and Alunni, S. (1983). *J. Am. Chem. Soc.*, **105**, 502–513.
- Swieton, G., v. Jouanne, J., Kelm, H., and Huisgen, R. (1983). *J. Chem. Soc., Perkin Trans. II*, 37–43.
- Symons, E. A. and Clermont, M. J. (1981). *J. Am. Chem. Soc.*, **103**, 3127–3130.
- Symons, E. A., Clermont, M. J., and Coderre, L. A. (1981). *J. Am. Chem. Soc.*, **103**, 3131–3135.
- Symons, E. A. and Buncel, E. (1972). *J. Am. Chem. Soc.*, **94**, 3641–3642.
- Szwarc, M. (1968) *Carbanions, Living polymers and electron transfer processes*. Wiley-Interscience, New York, pp. 216–225.
- Szwarc, M. (ed.) (1972). *Ions and ion pairs in organic reactions*. Wiley-Interscience, New York.
- Taft, R. W., Abboud, J.-L. M., Kamlet, M. J., and Abraham, M. H. (1985). *J. Solution Chem.*, **14**, 153–175.
- Taft, R. W. and Bordwell, F. G. (1988). *Acc. Chem. Res.*, **21**, 463–469.
- Taft, R. W., Abboud, J.-L. M., and Kamlet, M. J. (1981). *J. Am. Chem. Soc.*, **103**, 1080–1086.
- Tanaka, H. (1987). *J. Chem. Phys.*, **86**, 1512–1520.
- Tapia, O. and Goscinski, O. (1975). *Mol. Phys.*, **29**, 1653–1661.
- Terrier, F., McCormack, P., Kizilian, E., Halle, J.C., Demerseman, P., Guir, F., and Lion, C. (1991). *J. Chem. Soc. Perkin Trans.*, **2**, 153–158.

- Terrier, F., Moutiers, G., Xiao, L., LeGuevel, E. and Guir, P. (1995). *J. Org. Chem.*, **60**, 1748–1754.
- Thielmans, A. and Massart, D. I. (1985) *Chimia*, **39**, 236–242.
- Thomson, B. A. and Iribarne, J. V. (1979). *J. Chem. Phys.*, **71**, 4451–4463.
- Tobe, M. L. and Burgess, J. (1999). *Inorganic reaction mechanisms*. Addison Wesley Longman, Harlow.
- Trémillon, B. (1971). *Pure Appl. Chem.*, **25**, 395–428.
- Trémillon, B. (1974). *Chemistry in non-aqueous solvents*. Reidel, Dordrecht and Boston.
- Troe, J. (1978). *Ann. Rev. Phys. Chem.*, **29**, 223–250.
- Usanovich, M. (1939). *Zhur. Obshch. Khim.*, **9**, 182–192.
- van Leeuwen, J. M. J., Groeneveld, J., and deBoer, J. (1959). *Physica*, **25**, 792–808.
- van Eldik, R. and Hubbard, C. D. (eds.) (1997). *Chemistry under extreme or non-classical conditions*, Wiley, New York, Spektrum, Heidelberg, Chaps. 2–4.
- van Eldik, R. and Meyerstein, D. (2000). *Acc. Chem. Res.*, **33**, 207–214.
- van Eldik, R., Asano, T., and le Noble, W. J. (1989). *Chem. Rev.*, **89**, 549–688.
- Vogel, A., revised. Bassett, J., Denney, R. C., Jeffrey, G. H., and Mendham, J. (1978). *Textbook of quantitative inorganic analysis*. Longman, Harlow (Essex), pp. 687–68.
- Walden, P. (1914). *Bull. Acad. Imper. Sci. (St. Petersburg)*, 405–422.
- Walter, W. and Bauer, O. H. (1977). *Justus Liebigs Ann. Chem.*, 421–429.
- Walther, D. (1974). *J. Prakt. Chem.*, **316**, 604–614.
- Wasserscheid, P., Gordon, C. M., Hilgers, C., Muldoon, M. J., and Dunkin, I. R. (2001). *Chem. Commun.*, **13**, 1186–1187.
- Wasserscheid, P. and Keim, W. (2000). *Angew. Chem. Int. Ed. Engl.*, **39**, 3772–3789.
- Welton, T. (1999). *Chem. Rev.*, **99**, 2071–2083.
- Werblan, L., Rotowska, A., and Minc, S. (1971). *Electrochim. Acta*, **16**, 41–49.
- Wheeler, C., West, K. N., Liotta, C. L., and Eckert, C. A. (2001). *Chem. Commun.*, **10**, 887–888.
- Wilson, K. R. (1989). In Moreau, M. and Turq., P., eds. *Chemical reactivity in liquids: fundamental aspects*, Plenum, New York.
- Winstein, S., Fainberg, A. H., and Grunwald, E. (1957). *J Am. Chem. Soc.*, **79**, 4146–4155.
- Winstein, S., Clippinger, E., Fainberg, A. H., and Robinson, G. C. (1954) *J. Am. Chem. Soc.*, **76**, 2597–2598.
- Wold, S. and Sjöström, M. (1978). In Shorter, J. and Chapman, N. B., eds. *Correlation analysis in chemistry: recent advances*. Plenum, New York, Chapter 1.
- Wong, M. W., Wiberg, K. B., and Frisch, M. J. (1992). *J. Am. Chem. Soc.*, **114**, 1645–1642.
- Wood, J. M., Hinchcliffe, P. S., Laws, A. P. and Page, M. I. (2002). *J. Chem. Soc., Perkin Trans.*, **2**, 938–946.
- Wooley, E. M. and Hepler, L. G. (1972). *Anal. Chem.*, **44**, 1520–1523.
- Wypych, G. (ed.) (2001). *Handbook of solvents*, ChemTec, Toronto and Wm. Andrew, Norwich, NY.
- Yamane, H., Nakao, Y., Kawabe, S., Xie, Y., Kanehisa, N., Kai, Y., Kinoshita, M., Mon, L., and Hayashi, Y. (2001). *Bull. Chem. Soc. Japan*, **74**, 2107–2112.
- Yarnell, J. L., Katz, M. J., Wenzel, R. G., and Koenig, S. H. (1973). *Phys. Rev. A*, **7**, 2130–2144.
- Yingst, A. and McDaniel, D. H. (1967). *Inorg. Chem.*, **6**, 1067–1068.
- Yu, H.-A., Pettitt, B. M., and Karplus, M. (1991). *J. Am. Chem. Soc.*, **113**, 2425–2434.