REFERENCES

1. Bernal, J.D. and King, S.V. 1968. Experimental studies of a simple liquid model. In H.N.V. Temperley, J.S. Rowlinson, and G.S. Rushbrooke (ed.), Physics of simple liquids, pp. 231-252. Amsterdam: North-Holland press.

2. Pieranski, P., Malecki, J., Kuczynski, W. and Wojciechowski, K. 1978. A hard disc system, an experimental model. Phil.Mag. A37: 107-115.

3. White, T.R., Hsu, S.P., Mobley, M.J. and Glaunsinger, W.S. 1984. Magnetic properties of metal-ammonia compound. J.Phys.Chem. 88: 3890-3895.

4. Glausinger, W.S., Von Dreele, R.B., Marzke, R.F., Hanson, R.C., Chieuk, P., Damay, P. and Catterall, R. 1984. Structure and properties pf metal-ammonia compounds on the trial of a new ammonia geometry. J.Phys.Chem. 88: 3860.

5. Ohtaki, H., Yamaguchi, T. and Maeda, M. 1976. Bull.Che.Soc.Japan 49: 701-708.

6. Maeda, M. and Ohtaki, H. 1975. Bull.Chem.Soc.Japan. 48: 3755-3756.

7. Narten, A.H. 1977. J.Chem.Phys. 66: 3117-3120

8. Metropolis, N., Rosenbluth, A.W., Rosenbluth, M.N., Teller, A.H. and Teller E. 1953. Equation of state calculation by computing machine. J.Chem.Phys. 21(6): 1087-1092.

9. Alder, B.J. and Wainwight, T.E. 1960. Studied in molecular dynamics II:

Behaviour of a small number of elastic sphere. J.Chem.Phys. 33(5): 1439-1451.

10. Lie, G.C., Clementi, E. and Yoshimine, M. 1975. Study of the structural of molecular complexes XIII: Monte Carlo simulation of liquid water with a configuration interaction pair potential. J.Chem.Phy. 64(6): 2314-2323.

11. Swaminathan, S., Harrison, S.W. and Beveridge, D.L. 1977. Monte Carlo studies on the structure of a dilute aqueous solution of methane. J.Am.Chem.Soc. 100(8): 5705-5712.

12. Hagler, A.T. and Moult, J. 1978. Computer simulation of the solvent structure around biological macromolecules. Nature 272(16): 1978.

13. Jorgensen, W.L. and Ibrahim, M. 1980. Structure and properties of liquid ammonia. J.Am.Chem.Soc. 102(10): 3309-3315.

14. Jorgensen, W.L. 1981. Simulation of liquid ethanol including internal rotation. J.Am.Chem.Soc. 103(2): 345-350.

15. Bolis, G., Corongiu, G. and Clementi, E. 1981. Methanol in water solution at 300 K. Chem.Phys.Lett. 6(3): 299-306.

16. Jorgensen, W.L. and Madura, J.D. 1983. Solvation and conformation of methanol in water. J.Am.Chem.Soc. 105(6):.

17. Linse, P., Karlstrom, G. and Jonsson, B. 1984. Monte Carlo studies of a dilute aquesous solution of benzene. J.Am.Chem.Soc. 106(15): 4096-4102.

18. Bymes, J.M. and Sandler, S.I. 1984. MOnte Carlo simulation of liquid ethane. J.Chem.Phys. 80(2): 881-885.

19. Dietz, W. and Heinzinger, K. 1984. Structure of liquid chloroform:

A comparison between computer sinulation and neutron scattering results. Ber.Bunsenges.Phys.Chem. 88: 543-546.

20. Okazaki, S., Touhara, H. and Nakanishi, K. 1984. Computer experiments of aqueous solutions V: Monte Carlo calculation on the hydrophobic interaction in 5 mol % methanol solution. J.Chem.Phys. 81(2): 890-894.

21. Alagona, G., Ghio, C. and Kollman, P.A. 1985. Monte Carlo simulations of the solvation of the dimethyl phosphate anion. J.Am.Chem.Soc. 107(8): 2229-2238.

22. Hannongbua, S.S. and Rode, B.M. 1985. A Monte Carlo study on the influence of macrocyclic compounds on the structure of water. J.Sci.Soc.Thailand 11: 135-139.

23. Hannongbua, S.S. and Rode, B.M. 1986. Monte Carlo simulations of a cyclen molecule in water. J.Chem.Soc.Faraday.Trans. II 82: 1021-1031.

24. Bounds, D.G. 1985. A molecular dynamics study of the structure of water around the ions Li(I), Na(I), K(I), Ca(I), Ni(I) and Cl(I). Mol.Phys. 54(6): 1335-1355.

25. Rahman, A., Stillinger, F.H. and Lemberg, H.L. 1975. Study of a central force model for liquid water by molecular dynamics. J.Chem.Phys. 63(12): 5223-5230.

26. Narusawa, H. and Nakanishi, K. 1980. A simulation of preferential solvation in ternary Lennard-Jones liquid mixtures by the molecular dynamics method. J.Chem.Phys. 73(8): 4066-4070.

27. Tanaka, H., Nakanishi, K. and Touhara, H. 1985. Computer experiments on aqueous solutions VII: Potential energy function for urea

dimer and molecular dynamics calculation of 8 mol % aqueous solution of urea. J.Chem.Phys. 82: 5184-5190.

28. Sphor, E. and Heinzinger, K. 1986. Molecular dynamics simulation of a water/metal interface. Chem.Phys.Lett. 123(3): 218-220.

29. Probst, M.M., Radnai, T., Heinzinger, K., Bopp, P. and Rode, B.M. Molecular dynamics and X-ray investigation of an aqueous $CaCl_2$ solution. J.Phys.Chem. 89(5):.

30. Palinkas, G. and Heinzinger, K. 1986. Hydration shell structure of the calcium ion. Chem.Phys.Lett. 126(3): 251-254.

31. Migliore, M. and Fornili, S.L., Spohr, E., Palinkas, G., and Heinzinger, K. 1986. A molecular dynamics study of the structure of an aqueous KCl solution. Z.Naturforsch. 41a: 826-834.

32. Limtrakul, J.P., Fujiwara, S. and Rode, B.M. 1985. A quantum chemical analysis of the structural entities in aqueous sodium chloride solution and their concentration dependence. Anal.Sci. 1: 29-32.

33. Hannongbua, S.S., Ishida, T., Spohr, E. and Heinzinger, K. 1988. Molecular dynamics study of a lithium ion in ammonia. Z.Naturforsch. 43a: 572-582.

34. Tanabe, Y. and Rode, B.M. 1988. Monte Carlo simulation of an 18.45 mol % aqueous ammonia solution. J.Chem.Soc.Faraday Trans. II 84(6): 679-692.

35. Rode, B.M. and Tanabe, Y. 1988. A Monte Carlo study on preferential solvation of sodium(I) in aqueous ammonia. J.Chem.Soc.Faraday Trans. II 84:.

36. Czerwan, H.J. and Peinel, G. 1990. Molecular dynamics method : Publication and citation patterns of a research specialty of computer simulation. Information Quaterly for Computer Simulation of condensed phases 32, 51.

37. Allen, M.P. and Tildesley, D.J. 1987. Computer Simulation of Liquids. New York: Oxford University Press.

38. Benjamin, W.A. 1964. Metal ammonia solutions. In Lepoutre and Spienko, M.J. (ed.), Colloque Weyl I,. New York: New York press.

39. Lagowski, J.J. and Spienko, M.J. 1970. Metal ammonia solutions. Colloque Weyl II. London: Butterworths.

40. Jortner, J. and Kesner, N.R. 1973. Electrons in fluids. Colloque Weyl III,. New York: Springer-Verlag.

41. Rahman, A. 1964. Phys.Rev. 98: 159.

42. Morukuma, K. 1971. Molecular orbital studies of hydrogen bonds III. C=O...H-O hydrogen bond in $H_2CO...H_2O$ and $H_2CO...2H_2O$. J.Chem.Phys. 55: 1971.

43. Williams, D.E. and Craycroft, D.J. 1987. Non-bonded H...H repulsion energy from ab initio SCF calculations of methane, ammonia, water and methanol dimers. J.Phys.Chem. 91: 6365.

44. Alder, B.J. and Wainwright, T.E. 1958. In Prigogine, I. (ed.), Transport processes in statistical mechanics, New York: Interscience.

45. Alder, B.J. and Wainwright, T.E. 1957. J.Chem.Phys. 27: 1208.

46. Metropolis, N., Rosenbluth, A.W., Teller, A.H. and Teller, E. J.Chem.Phys. 21: 1087.

47. Wood, W.W. and Jacobson, J.D. 1957. J.Chem.Phys. 27: 1207.

48. Bernal, J.D. 1964. Proc.Roy.Soc. A280: 299.

49. Hirschfelder, J.O., Curtiss, C.F. and Bird, R.B. 1964. Molecular theory of geses and liquids rev.ed. New York: Wiley.

50. Hagler, A.T. and Lifson, S. 1974. Energy functions for peptides and proteins II: The amide hydrogen bond and calculation of amide crystal properties. J.Am.Chem.Soc. 96: 5327.

51. Lifson, S. and Warshel, A. 1968. Consistent force field for calculations of conformations, vibrational spectra, and elthalpies of cycloalkane and n-alkane molecules. J.Chem.Phys. 49: 5116.

52. Warshel, A. and Lifson, S. 1970. Consistent force field calculations vibrations, molecular conformations and enthalpies of alkanes. J.Chem.Phys. 53: 582.

53. Roothaan, C.C.J. 1951. Self consistent field theory for opened shell of electronic systems. Rev.Mod.Phys. 23: 69.

54. Roothaan, C.C.J. 1960. Self consistent field theory for opened shell of electronic systems. Rev.Mod.Phys. 32: 179.

55. Slater, J.S. 1930. Atomic shielding constant. Phys.Rev. 36: 57-64.

56. Boys, S.F. 1951. Electronic wave functions IV: Some general theorems for the calculation of Schrodinger integral between complicated vector. Coupled functions for many electron atoms. Proc.Roy.Soc. A207: 181-197.

57. Whitten, J.C. 1963. Gaussian expansion of hydrogen atom wave functions. J.Chem.Phys. 39: 349-352.

58. Whitten, J.C. 1966. Gaussian lobe function expansion of Hartree Fock solution for the first row atoms and ethylene.

J.Chem.Phys. 44: 359-364.

59. Spirko, V. 1983. Vibrational anharmonicity and the inversion potential function of NH_3. J.Mol.Spectrosc. 101: 30.

60. Benedict, W.S. and Plyler, E.K. 1985. Can.J.Phys. 82: 890.

61. Dupuis, M. Watts, J.D., Villar H.O. and Hurst, G.T. 1988. HONDO version 7.0 (1987) Documentation. KGN 169. Kingston: IBM Corporation.

62. Hay, P.J. and Wadt, W.R. 1985. J.Chem.Phys. 82: 270.

63. Dunning T.H. 1970. J.Chem.Phys. 53: 2823.

64. Stevens, W.J., Basch, H. and Kraus, M. J.Chem.Phys. 81: 6026.

65. Huzinaga, S. 1985. Gaussian basis set for molecular calculations. Physical Science Data 16. Amsterdam: Elsevier.

66. Swaminathan, R.J., Whitehead, E. and Beveridge, D.L. J.Am.Chem.Soc. 99: 7817.

67. Jorgensen, W.L. and Cournoyer, N.E. 1978. J.Am.Chem.Soc. 100: 4942.

68. Wood, W.W. and Parker, F.R. 1957. J.Chem.Phys. 27: 720.

69. Verlet, L. 1967. Phys.Rev. 98: 159.

70. Verlet, L. 1967. Computer experiments on classical fluids I: Thermodynamical properties of Lennard-Jones molecules. Phy.Rev. 159: 98

71. Gear, C.W. 1966. The numerical integration of ordinary differential equations of various orders. Report ANL. pp. 7126, Argonne National Laboratory.

72. Gear, C.W. 1971. Numerical initial value problems in ordinary differential equations. NJ.: Prentice Hall.

73. Narten, A.H. 1977. Liquid ammonia: Molecular correlation functions

from X-ray diffraction. J.Chem.Phys. 66: 3117.

74. Yongyai, Y.P., Kokpol, S.U. and Rode, B.M. 1991. Chem.Phys. : 403.

75. Probst M.M. 1987. Chem.Phys.Lett. 137: 229.

76. Hannongbua, S.S. 1991. A molecular dynamics simulation of the structure of sodium ion in liquid ammonia. Aust.J.Chem. 44: 447.

77. Klein, M.L., and McDonald, I.R. 1981. J.Chem.Phys. 74: 4214.

78. Rode, B.M., Islam, S.M. and Yongyai, Y. 1991. Pure Appl.Chem. 63: 1894.

79. Yongyai, Y., Kokpol, S. and Rode, B.M. 1991. Chem.Phys. 156: 403

80. Rode, B.M. and Islam, S.M. J.Chem.Soc.Faraday Trans. Submitted for publication.

81. Rode, B.M. and Islam, S.M. 1991. Z.Naturforsch 46a: 357.

82. Jancso, G., Heinzinger, K. and Bopp, P. 1985. Z.Naturforsch. 40a: 1235.

83. Szasz, Gy.I. and Heinzinger, K. 1983. Earth Planet Sci.Lett. 64: 163.

84. Palinkas, G., Bopp, P., Jancso, G. and Heinzinger, K. 1984. Z.Naturforsch. 39a: 179.

85. Probst, M.M., Bopp, P., Heinzinger, K. and Rode, B.M. 1984. Chem.Phys.Lett. 106: 317.

86. Szasz, Gy.I., Heinzinger, K. and Riede, W.O. 1981. Ber.Bunsenges. Phys.Chem. 85: 1056.

87. Geiger, A. 1981. Ber.Bunsenges.Phys.Chem. 85: 52.

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