

## Bibliography of Professor G. H. Bolt

- Vries, D. A. de & G. H. Bolt, 1949. Enige beschouwingen omtrent het gedrag van de tensimeter. *Mededelingen Landbouwhogeschool Wageningen* 49: 245-254.
- Schuffelen, A. C. & G. H. Bolt, 1950. Some notes on the synthesis of humus compounds. *Landbouwkundig Tijdschrift* 62: 333-338.
- Bolt, G. H., 1952. The significance of the measurements of the zeta potential and the membrane potential in soil and clay water systems. M.Sc. Thesis, Cornell University, 73 pp.
- Bolt, G. H. & M. Peech, 1953. The application of the Gouy theory to soil water systems. *Soil Science Society of America Proceedings* 17: 210-213.
- Peech, M., R. A. Olsen & G. H. Bolt, 1953. The significance of potentiometric measurements involving liquid junction in clay and soil suspension. *Soil Science Society of America Proceedings* 17: 214-218.
- Bolt, G. H., 1954. Physico-chemical properties of the electric double layer on planar surfaces. Ph.D. Thesis, Cornell University, 104 pp.
- Gill, W. R. & G. H. Bolt, 1955. Pfeffer's studies of the root growth pressures exerted by plants. *Agronomy Journal* 47: 166-168.
- Bolt, G. H., 1955. Analysis of the validity of the Gouy-Chapman theory of the electric double layer. *Journal of Colloid Science* 10: 206-218.
- Bolt, G. H., 1955. Ion adsorption by clays. *Soil Science* 79: 267-276.
- Bolt, G. H. & R. D. Miller, 1955. Comparison studies of illite suspensions. *Soil Science Society of America Proceedings* 19: 285-288.
- Bolt, G. H., 1956. Physico-chemical analysis of the compressibility of pure clays. *Geotechnique* 6: 86-93.
- Bolt, G. H. & B. P. Warkentin, 1956. Influence of the method of sample preparation on the negative adsorption of anions in montmorillonite suspensions. Proceedings 6th International Congress of Soil Science (Paris), Vol. B, p. 33-40.
- Bolt, G. H., 1957. Determination of the charge density of silica soils. *Journal of Physical Chemistry* 61: 1166-1169.
- Warkentin, B. P., R. D. Miller & G. H. Bolt, 1957. Swelling pressure of montmorillonite. *Soil Science Society of America Proceedings* 21: 495-497.
- Bolt, G. H., 1957. Adsorptie-evenwichten in de bodem. Openbare les, Landbouwhogeschool, Wageningen, 20 pp.
- Bolt, G. H. & B. P. Warkentin, 1958. The negative adsorption of anions in clay suspensions. *Kolloid Zeitschrift* 156: 41-46.
- Bolt, G. H., 1958. De bepaling van het vochtgehalte en het volumegewicht van de bodem met behulp van neutronen en  $\gamma$ -stralen. *Landbouwkundig Tijdschrift* 70: 282-286.
- Bolt, G. H., A. R. P. Janse & A. C. Schuffelen, 1958. Definition and determination of soil structure. International Symposium on Soil Structure, Gent. *Mededelingen Landbouwhogeschool en Opzoekingsstations van de Staat te Gent* 24: 251-256.

- Schuffelen, A. C. & G. H. Bolt, 1958. Ionic equilibrium in soils. Band II. Vortragsveröffentlichungen der zweiten und vierten Kommission der IBG, Hamburg, p. 131-146.
- Bolt, G. H. & R. D. Miller, 1958. Calculation of total and component potentials of water in soil. *Transactions American Geophysical Union* 39: 917-928.
- Lagerwerff, J. V. & G. H. Bolt, 1959. Theoretical and experimental analysis of Gapon's equation for ion exchange. *Soil Science* 87: 217-222.
- Bolt, G. H. & M. J. Frissel, 1960. Thermodynamics of soil moisture. *Netherlands Journal of Agricultural Science* 8: 57-78.
- Janse, A. R. P. & G. H. Bolt, 1960. The determination of the air permeability of soils. *Netherlands Journal of Agricultural Science* 8: 124-131.
- Bolt, G. H. & M. J. Frissel, 1960. The preparation of clay suspensions with specified ionic composition by means of exchange resins. *Soil Science Society of America Proceedings* 24: 172-177.
- Bolt, G. H., 1960. Cations in relation to clay surfaces. Proceedings 7th International Congress of Soil Science (Madison), Vol. 2, p. 321-352.
- Bolt, G. H., 1961. The pressure filtrate of colloidal suspensions. I. Theoretical considerations. *Kolloid Zeitschrift* 175: 33-39.
- Bolt, G. H., 1961. The pressure filtrate of colloidal suspensions. II. Experimental data on homoionic clays. *Kolloid Zeitschrift* 175: 144-150.
- Alexander, G. P. & G. H. Bolt, 1961. Aquasols of positively-charged coated silica particles and their production. U.S. Patent 3,007,878.
- Bolt, G. H., 1962. Fysisch-chemische aspecten van het vochttransport in poreuze media. *De Ingenieur* 28: 1-6.
- Frissel, M. J. & G. H. Bolt, 1962. Interaction between certain ionizable organic compounds (herbicides) and clay minerals. *Soil Science* 94: 284-291.
- Sumner, M. E. & G. H. Bolt, 1962. Isotopic exchange of potassium in an illite under equilibrium conditions. *Soil Science Society of America Proceedings* 26: 541-544.
- Bolt, G. H., 1962. Transportverschijnselen in de bodem. *Landbouwkundig Tijdschrift* 74: 926-933.
- Bolt, G. H., 1963. Differentiatie en specialisatie in de algemene bodemkunde. Inaugurale rede, Landbouwhogeschool, Wageningen, 17 pp.
- Bolt, G. H., M. E. Sumner & A. Kamphorst, 1963. A study of the equilibria between three categories of potassium in an illitic soil. *Soil Science Society of America Proceedings* 27: 294-299.
- Bolt, G. H. & F. A. M. de Haan, 1963. Determination of ion exchange characteristics of soils and clays. Report Research Contract, IAEA, 34 pp.
- Lahav, N. & G. H. Bolt, 1963. Interaction between calcium carbonates and bentonite suspensions. *Nature* 200: 1343-1344.
- Haan, F. A. M. de & G. H. Bolt, 1963. Determination of anion adsorption by clays. *Soil Science Society of America Proceedings* 27: 636-640.
- Bolt, G. H. & B. G. M. Pieters, 1964. Assessing the activity concentration of  $\beta$ -emitters by means of the end-window G.M. tube. *Analytica Chimica Acta* 31: 64-70.

- Haan, F. A. M. de, G. H. Bolt & B. G. M. Pieters, 1964. Application of radioactive K-isotopes to the determination of K-adsorption and K-release characteristics of potassium-containing materials. *International Journal of Applied Radiation and Isotopes* 15: 221-229.
- Lahav, N. & G. H. Bolt, 1964. Self-diffusion of Ca<sup>45</sup> into certain carbonates. *Soil Science* 97: 293-299.
- Bolt, G. H. & F. A. M. de Haan, 1964. Diffusion of alkali chlorides in clay-water systems: A discussion of a report by Gordon R. Dutt and Philip F. Low. I. Comment on the Dutt-Low report. *Soil Science* 97: 344-346.
- Reiniger, P., N. Lahav & G. H. Bolt, 1964. Determination of the cation exchange characteristics of calcareous soils. Proceedings 8th International Congress of Soil Science (Bucharest), Vol. III, p. 479-488.
- Schuffelen, A. C., F. F. R. Koenigs & G. H. Bolt, 1964. The isolation of the soil solution with the aid of filter paper tablets. Proceedings 8th International Congress of Soil Science (Bucharest), Vol. III, p. 519-528.
- Bolt, G. H. & J. V. Lagerwerff, 1965. Consequences of electrolyte redistribution during pressure-membrane equilibration of clays. *Soil Science* 99: 147-153.
- Bolt, G. H. & A. L. Page, 1965. Ion-exchange equations based on double-layer theory. *Soil Science* 99: 357-361.
- Haan, F. A. M. de, G. H. Bolt & B. G. M. Pieters, 1965. Diffusion of potassium-40 into an illite during prolonged shaking. *Soil Science Society of America Proceedings* 29: 528-530.
- Bolt, G. H. & F. A. M. de Haan, 1965. Interactions between anions and soil constituents. *IAEA Technical Reports Series* 48: 94-110.
- Bolt, G. H., 1966. Soil physical processes as boundary conditions to ion uptake. *IAEA Technical Reports Series* 65: 57-65.
- Day, P. R., G. H. Bolt & D. M. Anderson, 1967. Nature of soil water. In: *Agronomy Monograph* 11, p. 193-208. American Society of Agronomy, Madison, WI, USA.
- Bolt, G. H., 1967. Cation-exchange equations used in soil science – A review. *Netherlands Journal of Agricultural Science* 15: 81-103.
- Bolt, G. H. & P. H. Groenevelt, 1967. Thermostatistics and thermodynamics of soil water. Proceedings International Soil Water Symposium, ICID, Praha, 17 pp.
- Shainberg, I., W. D. Kemper & G. H. Bolt, 1967. Discussion of the paper by I. Shainberg and W. D. Kemper entitled: Ion exchange equilibria on montmorillonite. *Soil Science* 104: 441-453.
- Laudelout, H., R. van Bladel, G. H. Bolt & A. L. Page, 1968. Thermodynamics of heterovalent cation exchange reactions in a montmorillonite clay. *Transactions Faraday Society* 64: 1477-1488.
- Bolt, G. H. & C. J. G. Winkelmoen, 1968. Calculations of the standard free energy of cation exchange in clay systems. *Israel Journal of Chemistry* 6: 175-187.
- Bolt, G. H., 1968. On the use of radioactive tracers in diffusion experiments. *Soil Science Society of America Proceedings* 32: 889-890.
- Groenevelt, P. H. & G. H. Bolt, 1969. Non-equilibrium thermodynamics of the soil-water system. *Journal of Hydrology* 7: 358-388.

- Groenevelt, P. H. & G. H. Bolt, 1969. Permiselective properties of porous materials as calculated from diffuse double-layer theory. *Proceedings IAHR Symposium on Fundamentals of Transport Phenomena in Porous Media*, Haifa, p. 241-255.
- Bolt, G. H. & P. H. Groenevelt, 1969. Coupling phenomena as a possible cause of 'Non-Darcian' behaviour of water in soil. *Bulletin of the International Association of Scientific Hydrology* 14: 17-26.
- Bolt, G. H. & F. F. R. Koenigs, 1972. Some principles with respect to the interpretation of suction profiles in the field. *Transactions of Commissions V and VI of the ISSS*, p. 515-519.
- Bolt, G. H. & F. F. R. Koenigs, 1972. Physical and chemical aspects of the stability of soil aggregates. *International Meeting on the Fundamentals of Soil Conditioning*, Gent. *Mededelingen Fakulteit der Landbouwwetenschappen Gent* 37: 955-973.
- Groenevelt, P. H. & G. H. Bolt, 1972. Water retention in soil. *Soil Science* 113: 238-245.
- Bolt, G. H. & P. H. Groenevelt, 1972. Coupling between transport processes in porous media. *Proceedings 2nd IAHR-ISSS Symposium on Fundamentals of Transport Phenomena in Porous Media (Guelph)*, p. 630-652.
- Groenevelt, P. H. & G. H. Bolt, 1972. Coupling between transport processes in an anisotropic mixture of fluids and solid particles. *Proceedings 2nd IAHR-ISSS Symposium on Fundamentals of Transport Phenomena in Porous Media (Guelph)*, p. 653-666.
- Reiniger, P. & G. H. Bolt, 1972. Theory of chromatography and its application to cation exchange in soils. *Netherlands Journal of Agricultural Science* 20: 301-313.
- Groenevelt, P. H. & G. H. Bolt, 1973. Theory of transport in soils: generalized approaches based on continuum mechanics and thermodynamics of irreversible processes. In: A. Hadas, D. Swartzendruber, P. E. Rijtema, M. Fuchs & B. Yaron (Eds.), *Physical aspects of soil water and salts in ecosystems*. *Ecological Studies* 4: p. 43-48. Springer-Verlag, Berlin.
- Beek, C. G. E. M. van & G. H. Bolt, 1973. The relationship between the composition of the exchange complex and the composition of the soil solution. In: A. Hadas, D. Swartzendruber, P. E. Rijtema, M. Fuchs & B. Yaron (Eds.), *Physical aspects of soil water and salts in ecosystems*. *Ecological Studies* 4, p. 379-388. Springer-Verlag, Berlin.
- Bolt, G. H. & P. H. Groenevelt, 1974. Termostatyk i termodynamika wody gruntowej. *Archivum Hydrotechniki* 21: 371-389.
- Stroosnijder, L. & G. H. Bolt, 1974. Nomographic interpretation of water absorption data in terms of a two-parametric diffusivity water-content function. *Soil Science Society of America Proceedings* 38: 876-880.
- Stroosnijder, L. & G. H. Bolt, 1975. Reply to a note of J. Y. Parlange. *Soil Science Society of America Proceedings* 39: 1014.
- Bolt, G. H., 1975. Final report of the second committee on terminology in soil physics of the International Soil Science Society. *International Society of Soil Science Bulletin* 48: 16-22.

- Bolt, G. H. & M. G. M. Bruggenwert (Eds.), 1976. Soil chemistry. A. Basic elements, 1st ed. 1976, 2nd revised ed. 1978, Japanese ed. 1979, 3rd ed. 1981. Elsevier, Amsterdam.
- Bolt, G. H. & M. G. M. Bruggenwert, 1976. Composition of the soil. In: G. H. Bolt & M. G. M. Bruggenwert (Eds.), Soil chemistry. A. Basic elements, 3rd ed., 1981, p. 1-12.
- Novozamsky, I., J. Beek & G. H. Bolt, 1976. Chemical equilibria. In: G. H. Bolt & M. G. M. Bruggenwert (Eds.), Soil chemistry. A. Basic elements, 3rd ed., 1981, p. 13-42.
- Bolt, G. H., 1976. Surface interaction between the soil solid phase and the soil solution. In: G. H. Bolt & M. G. M. Bruggenwert (Eds.), Soil chemistry. A. Basic elements, 3rd ed., 1981, p. 43-53.
- Bolt, G. H., M. G. M. Bruggenwert & A. Kamphorst, 1976. Adsorption of cations by soil. In: G. H. Bolt & M. G. M. Bruggenwert (Eds.), Soil chemistry. A. Basic elements, 3rd ed., 1981, p. 54-90.
- Bolt, G. H., 1976. Adsorption of anions by soil. In: G. H. Bolt & M. G. M. Bruggenwert (Eds.), Soil chemistry. A. Basic elements, 3rd ed., 1981, p. 91-95.
- Bolt, G. H., 1976. Transport and accumulation of soluble soil components. In: G. H. Bolt & M. G. M. Bruggenwert (Eds.), Soil chemistry. A. Basic elements, 3rd ed., 1981, p. 126-140.
- Kamphorst, A. & G. H. Bolt, 1976. Saline and sodic soils. In: G. H. Bolt & M. G. M. Bruggenwert (Eds.), Soil chemistry. A. Basic elements, 3rd ed., 1981, p. 171-191.
- Bolt, G. H. (Ed.), 1979. Soil chemistry. B. Physico-chemical models, 1st ed. 1979, 2nd revised ed. 1982. Elsevier, Amsterdam.
- Bolt, G. H., 1979. The ionic distribution in the diffuse double layer. In: G. H. Bolt (Ed.), Soil chemistry. B. Physico-chemical models, 2nd ed., 1982, p. 1-26.
- Bolt, G. H., 1979. Thermodynamics of cation exchange. In: G. H. Bolt (Ed.), Soil chemistry. B. Physico-chemical models, 2nd ed., 1982, p. 27-46.
- Bolt, G. H., 1979. Theories of cation adsorption by soil constituents: distribution equilibrium in electrostatic fields. In: G. H. Bolt (Ed.), Soil chemistry. B. Physico-chemical models, 2nd ed., 1982, p. 47-76.
- Bolt, G. H. & F. A. M. de Haan, 1979. Anion exclusion in soil. In: G. H. Bolt (Ed.), Soil chemistry. B. Physico-chemical models, 2nd ed., 1982, p. 233-257.
- Bolt, G. H., 1979. Movement of solutes in soil: principles of adsorption/exchange chromatography. In: G. H. Bolt (Ed.), Soil chemistry. B. Physico-chemical models, 2nd ed., 1982, p. 285-348.
- Bolt, G. H., 1979. Electrochemical phenomena in soil and clay systems. In: G. H. Bolt (Ed.), Soil chemistry. B. Physico-chemical models, 2nd ed., 1982, p. 387-432.
- Bolt, G. H. & W. H. van Riemsdijk, 1982. Ion adsorption on inorganic variable charge constituents. In: G. H. Bolt (Ed.), Soil chemistry. B. Physico-chemical models, 2nd ed., p. 459-504.
- Haan, F. A. M. de & G. H. Bolt, 1979. Pollution. In: R. W. Fairbridge & C. W. Finkl (Eds.), The encyclopedia of soil science, Part I, p. 386-389. Hutchinson

- and Ross, Stroudsburg, PA, USA.
- Bolt, G. H. & M. G. M. Bruggenwert, 1981. On the interaction between solid and liquid phase in soil, emphasizing the use of models. *International Society of Soil Science Bulletin* 60: 85-88.
- Bolt, G. H., 1981. The nature properties of soil colloid surfaces. *International Society of Soil Science Bulletin* 60: 120-124.
- Harmsen, K. & G. H. Bolt, 1982. Movement of ions in soil. I. Ion exchange and precipitation. *Geoderma* 28: 85-101.
- Harmsen, K. & G. H. Bolt, 1982. Movement of ions in soil. II. Ion exchange and dissolution. *Geoderma* 28: 103-116.
- Bolt, G. H., 1985. Transport of solutes through soil. *Zeszyty Problemowe Postepow Nauk Rolniczych* 220: 417-422.
- Bolt, G. H., 1983. Transport phenomena in charged porous media. *Zeszyty Problemowe Postepow Nauk Rolniczych* 220: 423-426.
- Stroosnijder, L. & G. H. Bolt, 1984. The moisture characteristic of heavy clay soils. Proceedings ISSS Symposium on Water and Solute Transport in Heavy Clay Soils (Wageningen), p. 324-329.
- Bolt, G. H. & H. van Olphen, 1985. Book review of G. Sposito: Surface Chemistry of Soils. *Clays and Clay Minerals* 33: 367.
- Bolt, G. H., 1985. Transport of solutes in soil: basic features of front retardation. *Water Science and Technology* 17: 87-99.
- Riemsdijk, W. H. van, G. H. Bolt, L. K. Koopal & J. Blaakmeer, 1986. Electrolyte adsorption on heterogeneous surfaces: adsorption models. *Journal of Colloid and Interface Science* 109: 219-228.
- Riemsdijk, W. H. van, G. H. Bolt & L. K. Koopal, 1986. Surface heterogeneity and electrolyte adsorption. Proceedings of the 2nd ISSS-NATO Workshop on Soil Colloid Surfaces, Ghent (in press).
- Bolt, G. H. & W. H. van Riemsdijk, 1987. Surface chemical processes in soil. In: W. Stumm (Ed.), Aquatic surface chemistry, p. 127-164. Wiley Interscience, New York.
- Riemsdijk, W. H. van, J. C. M. de Wit, L. K. Koopal & G. H. Bolt, 1987. Metal ion adsorption on heterogeneous surfaces: Adsorption models. *Journal of Colloid and Interface Science* 116: 511-522.
- Bolt, G. H., 1987. Cation adsorption in aqueous clay systems: An introductory review. In: L. G. Schultz, H. van Olphen & F. A. Mumpton (Eds.), Proceedings International Clay Conference (Denver, 1985), p. 301-304.
- Bruggenwert, M. G. M., G. H. Bolt & T. Hiemstra, 1987. Acid-base systems in soil. Transactions 13th Congress of the International Society of Soil Science (Hamburg, 1986), Vol. V, p. 51-58.
- Berge, H. F. M. ten & G. H. Bolt, 1987. Coupling between liquid flow and heat flow in porous media: a connection between two classical approaches. *Transport in Porous Media* 2 (in press).