
References

Ahuja, L.R., D.K.Cassels, R.R.Bruce and B.B.Barnes, 1989. Evaluation of spatial distribution of hydraulic conductivity using effective porosity data. *Soil Science*, v.148 (6), p.404 - 411.

Allen, J.R.L., 1977. The possible mechanics of convolute lamination in graded sand beds. *Journal of the Geological Society of London*, v.134 (1), p.19 - 31.

Alley, R.B., 1989. Water-pressure coupling of sliding and bed deformation: II velocity-depth profiles. *Journal of Glaciology*, v.35 (119), p.119 - 129.

Alley, R.B., 1991. Deforming-bed origin for southern Laurentide till sheets? *Journal of Glaciology*, v.37 (125), p.67 - 76.

Al-Tabbaa, A. and D.Muir Wood, 1987. Some measurements of the permeability of kaolin. *Géotechnique*, v.37 (4), p.499 - 503.

Al-Tabbaa, A. and D.Muir Wood, 1991. Horizontal drainage during consolidation: insights gained from analyses of a simple problem. *Géotechnique*, v.41 (4), p.571 - 585.

Åmark, M., 1986. Clastic dikes formed beneath an active glacier. *Geologiska Föreningens i Stockholm Förhandlingar*, v.108 (1), p.13 - 20.

Arch, J., 1988. An experimental study of deformation microstructures in soft sediments. unpublished Ph.D. thesis, University of Wales, Aberystwyth. 387pp.

Arch, J. and A.Maltman, 1990. Anisotropic permeability and tortuosity in deformed wet sediments. *Journal of Geophysical Research*, v.95 (B10), p.9035 - 9045.

Arch, J. and A.Maltman, 1993. Reply to "Comment on "Anisotropic Permeability and Tortuosity in Deformed Wet Sediments" by Arch, J. and A.Maltman" by Brown, K.M. and J.C.Moore. *Journal of Geophysical Research*, v.98 (B10), p.17865 - 17866.

Arch, J., A.J.Maltman and R.J.Knipe, 1988. Shear - zone geometries in experimentally deformed clays: the influence of water content, strain rate and primary fabric. *Journal of Structural Geology*, v.10 (1), p.91 - 99.

Athy, L.F., 1930. Density, porosity, and compaction of sedimentary rock. *Bulletin of the American Association of Petroleum Geologists*, v.14 (1), p.194 - 200.

Atkinson, J.H. and D.Richardson, 1987. The effect of local drainage in shear zones on the undrained strength of overconsolidated clay. *Géotechnique*, v.37 (3), p.393 - 403.

Awadallah, S.A., 1991. A simple technique for vacuum impregnation of unconsolidated, fine grained sediments. *Journal of Sedimentary Petrology*, v.61 (4), p.632 - 633.

Aydin, A., 1978. Small faults formed as deformation bands in sandstone. *Pure and Applied Geophysics*. v.116, p.913 - 930.

Baas-Becking, L.G.M., M.I.R.Kaplan and D.Moore, 1960. Limits of the natural environment in terms of pH and oxidation-reduction potentials. *Journal of Geology*, v.68 (3), p.243-284.

Baker, D.W., K.S.Chawla, and R.J.Krizek, 1993. Compaction fabrics of pelites: experimental consolidation of kaolinite and implications for analysis of strain in slate. *Journal of Structural Geology*, v.15 (9/10), p.1123 - 1137.

Bardet, J.P. and J.Proubet, 1992. Shear - band analysis in idealized granular material. *Journal of Engineering Mechanics*, v.118 (2), p.397 - 415.

Barron, R.A., 1948. Consolidation of fine-grained soils by drain wells. *Proceedings of the American Society of Civil Engineers*, v.113, p.718 - 754.

Bell, C.M., 1981. Soft-sediment deformation of sandstone related to the Dwyka glaciation in South Africa. *Sedimentology*, v.28 (3), p.321 - 329.

Benn, D.I., 1995. Fabric signature of subglacial till deformation, Breidamerkurjökull, Iceland. *Sedimentology*, v.42, p.735 - 747.

Benn D.I. and D.J.A.Evans, 1998. *Glaciers and Glaciation*. Arnold. 734pp.

Blake, E.W., 1992. The deforming bed beneath a surge-type glacier: measurement of mechanical and electrical properties. unpublished PhD thesis, University of British Columbia. 179pp.

Bolton, M., 1979. *A guide to soil mechanics*. MacMillan Press, London and Basingstoke. 439 pp.

Boulton, G.S, 1976. The origin of glacially fluted surfaces - observation and theory. *Journal of Glaciology*, v.17 (76), p.287 - 309.

Boulton, G.S, 1977. A multiple till sequence formed by a late Devensian Welsh ice-cap: Glanllynau, Gwynedd. *Cambria*, v.4, p.10 - 31.

Boulton, G.S, 1979. Processes of glacier erosion on different substrata. *Journal of Glaciology*, v.23 (89), p.15 - 38.

Boulton, G.S., 1987. A theory of drumlin formation by subglacial sediment deformation. In, Menzies, J. and J.Rose (eds.), 1987. *Drumlin Symposium*. Balkema. p.25 - 80.

Boulton, G.S. and K.E.Dobbie, 1993. Consolidation of sediments by glaciers: relations between sediment geotechnics, soft-bed glacier dynamics and subglacial ground-water flow. *Journal of Glaciology*, v.39 (131), p.26 - 44.

Boulton, G.B. and R.C.A.Hindmarsh. 1987. Sediment deformation beneath glaciers: rheology and geological consequences. *Journal of Geophysical Research*, v.92 (B9), p.9059 - 9082.

Boulton G.S., and A.S.Jones, 1979. Stability of temperate ice caps and ice sheets resting on beds of deformable sediment. *Journal of Glaciology*, v.24 (90), p.29 - 43.

Boulton, G.S., D.L.Dent and E.M.Morris, 1974. Subglacial shearing and crushing, and the role of water pressures in tills from South-east Iceland. *Geografiska Annaler*, v.56 (A), p.135 - 145.

Boulton, G.S., G.D.Smith, A.S.Jones and J.Newsome, 1985. Glacial geology and glaciology of the last mid-latitude ice sheets. *Journal of the Geological Society of London*, v.142 (3), p.447 - 474

Bouma, J., A.G.Jongmans, A.Stein, and G.PEEK, 1989. Characterizing Spatially Variable Hydraulic Properties of a Boulder Clay Deposit in The Netherlands. *Geoderma*, v.45, p.19 - 29.

Brewer, R., 1976. Fabric and mineral analysis of soils. Krieger, Huntington. 482pp.

Broecker, W.S. and G.H.Denton, 1990. The role of ocean-atmosphere reorganisations in glacial cycles. *Quaternary Science Reviews*, v.9 (4), p.305 - 341.

Brown, K.M. and J.C.Moore, 1993. Comment on "Anisotropic Permeability and Tortuosity in Deformed Wet Sediments" by J.Arch and A.Maltman. *Journal of Geophysical Research*, v.98 (B10), p.17859 - 17864.

Brown, K.M., D.N.Dewhurst, M.B.Clennell and G.K.Westbrook. Permeability anisotropy in consolidated and sheared kaolinite. In press.

Brown, N.E., B.Hallet, and D.B.Booth. 1987. Rapid soft bed sliding of the Puget glacial lobe. *Journal of Geophysical Research*, v.92 (B9), p.8985 - 8997.

Bruce, V. and P.R.Green, 1990. Visual perception; physiology, psychology and ecology. Laurence Erlbaum Associates, Hove and London. 431pp.

Byerlee, J., V.Mjachkin, R.Summers, and O.Voevoda, 1978. Structures developed in fault gouge during stable sliding and stick-slip. *Tectonophysics*, v.44, p.161 - 171.

Bryne, T., A.Maltman, E.Stephenson, W.Soh and R.Knipe, 1993. Deformation structures and fluid flow in the toe region of the Nankai accretionary prism. In, Hill, I.A., A.Taira, J.V.Firth et al., 1993. *Proceedings of the ocean drilling program, scientific results*, v.131, p.83 - 101.

Carruthers, R.G., 1948. The secret of the glacial drift (I/II). *Proceedings of the Yorkshire Geological Society*, v.27 (3), p.129 - 173.

Catt, J.A. and P.G.N.Digby, 1988. Boreholes in the Wolstonian Basement Till at Easington, Holderness, July 1985. *Proceedings of the Yorkshire Geological Society*, v.47 (1), p.21 - 27.

Catt, J.A., and L.F.Penny, 1966. The Pleistocene deposits of Holderness, East Yorkshire. *Proceedings of the Yorkshire Geological Society*, v.35 (3), p.375 - 420.

Clark, P.U., 1987. Subglacial sediment dispersal and till composition. *Journal of Geology*, v.95 (4), p.527 - 541.

Clark, P.U., 1991. Striated clast pavements: Products of deforming subglacial sediment? *Geology*, v.19 (5), p.530 - 533.

Clark, P.U., and A.K.Hansel, 1989. Clast ploughing, lodgement and glacier sliding over a soft glacier bed. *Boreas*, v.18 (3), p.201 - 207.

Clarke, G.K.C., 1987. Subglacial till: a physical framework for its properties and processes. *Journal of Geophysical Research*, v.92 (B9), p.9023 - 9036.

Clarke, C.K.C. and T.Murray, 1991. Effect of deformation on permeability of glacial till. *EOS*, v.72 (44), p.158.

Clarke, G.K.C., S.G.Collins and D.E.Thompson, 1984. Flow, thermal structure, and subglacial conditions of a surge-type glacier. *Canadian Journal of Earth Sciences*, v.21 (2), p.232 - 240.

Coutard, J.P. and H.J.Mücher, 1985. Deformation of laminated silt loam due to repeated freezing and thawing cycles. *Earth Surface Processes and Landforms*, v.10 (4), p.309 - 319.

Cowan, D.S., 1982. Origin of "vein structure" in slope sediments on the inner slope of the Middle America trench off Guatemala. *DSDP*, v.67, p.645 - 649.

Cowan, D.S., 1985. Structural styles in Mesozoic and Cenozoic mélanges in the western Cordillera of North America. *Bulletin of the Geological Society of America*, v.96 (4), p.451 - 462.

Daintith, J. and R.D.Nelson (eds.), 1989. *The Penguin dictionary of mathematics*. 350pp.

Delage, P. and G.Lefebvre, 1984. Study of the structure of a sensitive Champlain clay and of its evolution during consolidation. *Canadian Geotechnical Journal*, v.21, p.21 - 35.

Dewhurst, D.N., M.B.Clennell, K.M.Brown, and G.K.Westbrook. Mechanical behaviour and permeability anisotropy of consolidated clays. In press.

Dowdeswell, J.A. and M.Sharp, 1986. Characterization of pebble fabrics in modern terrestrial glacial sediments. *Sedimentology*, v.33 (5), p.699 - 710.

Dreimanis, A., 1988. Tills: their genetic terminology and classification. In, R.P. Goldthwait and C.L.Matsch (eds). *Genetic classification of glaciogenic deposits*. Balkema, Rotterdam. p. 17 - 84.

Echelmeyer, K. and W.Zhongxiang, 1987. Direct observation of basal sliding and deformation of basal drift at sub-freezing temperatures. *Journal of Glaciology*, v.33 (113), p.83 - 98.

Evans, D.J.A., L.A.Owen, and D.Roberts, 1995. Stratigraphy and sedimentology of Devensian (Dimlington-stadial) glacial deposits, East Yorkshire, England. *Journal of Quaternary Science*, v.10 (3), p.241 - 265.

Evenson, E.B., 1971. The relationship of Macro- and Microfabric of Till and the Genesis of Glacial Landforms in Jefferson County, Wisconsin. In, R.P.Goldthwait (ed). *Till: a Symposium*. Ohio State University Press, Ohio. p.345 - 364.

Eyles, N.and A.M.McCabe, 1989. The late Devensian Irish Sea Basin: the sedimentary record of a collapsed ice sheet margin. *Quaternary Science Reviews*, v.8 (4), p.307 - 351.

Eyles, N., C.H.Eyles and A.D.Miall, 1983. Lithofacies types and vertical profile models; an alternative approach to the description and environmental interpretation of glacial diamict and diamictite sequences. *Sedimentology*, v.30 (3), p.393 - 410.

Eyles, N., A.M.McCabe and D.Q.Bowen, 1994. The stratigraphic and sedimentological significance of Late Devensian ice sheet surging in Holderness, Yorkshire, U.K. *Quaternary Science Reviews*, v.13, p.727 - 759.

Fearnside, W.G., 1910. The Tremadog slates and associated rocks of S.E.Carnarvonshire. *Quarterly Journal of the Geological Society of London*, v.LXVI, p.142 - 188.

Fischer, U.H., 1995. Mechanical conditions beneath a surge-type glacier. unpublished Ph.D., University of British Columbia, 100 pp.

Fitzpatrick, E.A., 1984. *Micromorphology of soils*. Chapman and Hall, London. 433pp.

Freese, V., 1988. On the mechanics of glaciotectionic contortion of clays. In, Croot (ed.), *Glaciotectionics: Form and processes*, Balkema. p.63 - 76.

Garrels, R.M. and C.L.Christ, 1965. *Solution, minerals, and equilibria*. Harper and Row, New York, Evanston, and London. 450pp.

Goodyear, J., 1962. X-ray examination of some East Yorkshire boulder clays. *Clay Minerals Bulletin*, v.5 (27), p.43 - 44.

Glen, J.W., J.J.Donner and R.G.West, 1957. On the mechanism by which stones in till become orientated. *American Journal of Science*, v.255 (10), p.194 - 205.

Grant, A., 1990. Magnetic and sedimentological studies of glacial and related sediments in the Lleyn peninsula, North Wales. Unpublished M.Phil. thesis. University of Wales, Aberystwyth. 161pp.

Gravenor, C.P and W.A.Meneley. 1958. Glacial flutings in central and Northern Alberta. *American Journal of Science*, v.256 (10), p.715 - 728.

Hallet, B., 1979. A theoretical model of glacial abrasion. *Journal of Glaciology*, v.23 (89), p.39 - 50.

Hallet, B., 1981. Glacial abrasion and sliding: their dependence on the debris concentration in basal ice. *Annals of Glaciology*, v.2, p.23 - 28.

Harrison, P.W., 1957. A clay-till fabric: its character and origin. *Journal of Geology*, v.65 (3), p.275 - 308.

Hart, J.K., 1989. Proglacial glaciotectionic deformation and the origin of the Cromer Ridge push moraine complex, North Norfolk, England. *Boreas*, v.19 (2), p.165 - 180.

Hart, J.K., 1994. Till fabric associated with deformable beds. *Earth Surface Processes and Landform*, v.19 (1), p.15 - 32.

Hart, J.K. and G.S.Boulton, 1991. The interrelation of glaciotectionic and glaciodepositional processes within the glacial environment. *Quaternary Science Reviews*, v.10, p.335-350.

Hart, J.K., R.C.A.Hindmarsh and G.S.Boulton, 1990. Styles of subglacial glaciotectionic deformation within the context of the Anglian ice-sheet. *Earth surface processes and landforms*, v.15 (3), p.227 - 241.

Hart, J. K. and D. H.Roberts, 1994. Criteria to distinguish between subglacial glaciotectionic and glaciomarine sedimentation: I - Deformational styles and sedimentology. *Sedimentary Geology*, v.91, p.191 - 214.

Hoel, P.G., 1984. *Introduction to mathematical statistics*. Wiley, Chichester. 436pp.

Hooke, R.LeB., and N.R.Iverson, 1995. Grain-size distribution in deforming subglacial tills: role of grain fracture. *Geology*, v.23 (1), p.57 - 60.

Hubbard, B.P., M.J.Sharp, I.C.Willis, M.K.Nielsen and C.C.Smart, 1995. Borehole water-level variations and the structure of the subglacial hydrological system of Haut Glacier d'Arolla, Valais, Switzerland. *Journal of Glaciology*, v.41 (139), p.572 - 583.

Iverson, N., 1990. Laboratory simulations of glacial abrasion: comparison with theory. *Journal of Glaciology*, v.36 (124), p.304 - 314.

Iverson, N.R. and D.J.Semmens, 1995. Intrusion of ice into porous media by regelation: A mechanism of sediment entrainment by glaciers. *Journal of Geophysical Research*, v.100 (B7), p.10219-10230.

Iverson, N.R., T.S.Hooyer and R.LeB.Hooke, 1996. A laboratory study of sediment deformation: stress heterogeneity and grain-size evolution. *Annals of Glaciology*, v.22, p.167 - 175.

Jansson, P., 1995. Water pressure and basal sliding on Storglaciären, northern Sweden. *Journal of Glaciology*, v.41 (138), p.232 - 240.

Jones, M., 1994. Mechanical principles of sediment deformation. In. A.J.Maltman (ed.). The geological deformation of sediments. Chapman and Hall, London. p.37 - 71.

Kamb, B., 1991. Rheological non-linearity and flow instability in the deforming bed mechanism of ice stream motion. *Journal of Geophysical Research*, v.96 (B10), p.16585 - 16595.

Kamb, B. and K.Echelmeyer, 1986. Stress-gradient coupling in glacier flow I: longitudinal averaging of the influence of ice-thickness and surface slope. *Journal of Glaciology*, v.32 (111), p.267 - 284.

Kemmis, T.J., 1981. Importance of the regelation process to certain properties of basal tills deposited by the Laurentide ice sheet in Iowa and Illinois, USA. *Annals of Glaciology*, v.2, p.147 - 152.

Kemp, R.A., 1995. Distribution and genesis of calcitic pedofeatures within a rapidly aggrading loess-paleosol sequence in China. *Geoderma*, v.65, p.303-316.

Kemp, R.A., E.Derbyshire, X.M.Meng, F.H.Chen, and B.T.Pan, 1995. Pedosedimentary reconstruction of a thick loess-paleosol sequence near Lanzhou in north-central China. *Quaternary Research*, v.43, p.30-45.

Kendall, P.F., 1902. A system of glacier-lakes in the Cleveland Hills. *Quarterly Journal of the Geological Society*, v.LVIII, p.471 - 571.

Kendall, P.F. and H.E.Wroot, 1924. *The geology of Yorkshire*. Published by the authors. 995pp.

Kirkbride, M.P., 1995. Processes of transportation. In, Menzies, J. (ed.). *Modern glacial environments; processes, dynamics and sediments*. Butterworth-Heinemann, Oxford. p.261 - 292.

Kluiving, S.J., 1994. Glaciotectonics of the Itterbeck - Uelsen push moraines, Germany. *Journal of Quaternary Science*, v.9 (3), p.235 - 244.

Kluiving, S.J., M.Rappol and F.M.van der Wateren, 1991. Till stratigraphy and ice movements in eastern Overijssel, The Netherlands. *Boreas*, v.20 (2), p.193 - 205.

Korina, N.A. and M.A.Faustova, 1964. Microfabrics of modern and old moraines. In, A. Jongerius (ed.). *Soil micromorphology*. Elsevier, Amsterdam. p.333 - 338.

Lafeber, D., 1964. Soil fabric and soil mechanics. In, A. Jongerius (ed.). *Soil micromorphology*. Elsevier, Amsterdam. p.351 - 361.

Lamplugh, G.W., 1881. On a shell-bed at the base of the drift at Speeton near Filey, on the Yorkshire coast. *The Geological Magazine, New Series, Decade II*, v.VIII, p.174 - 180.

Lawson, D.E., 1979. A comparison of the pebble orientations in ice and deposits of the Matanuska Glacier, Alaska. *Journal of Geology*, v.87 (6), p.629 - 645.

Logan, J.M., C.A.Dengo, N.G.Higgs and Z.Z.Wang, 1992. Fabrics of experimental fault zones: their development and relationship to mechanical behavior. In, Evans, B. and T-f Wong (eds.). *Fault mechanics and transport properties of rocks*, Academic press. p.33 - 67.

Lowe, D.R., 1975. Water escape structures in coarse-grained sediments. *Sedimentology*, v.22 (2), p.157 - 204.

Madgett, P.A. and J.A.Catt, 1978. Petrography, stratigraphy and weathering of Late Pleistocene tills in East Yorkshire, Lincolnshire and North Norfolk. *Proceedings of the Yorkshire Geological Society*, v.42 (1), p.55 - 108.

Maltman, A.J., 1977. Some microstructures of experimentally deformed argillaceous sediments. *Tectonophysics*, v.39, p.417 - 436.

Maltman, A.J. 1987. Shear zones in argillaceous sediments - an experimental study. In, M.E. Jones and R.M.F. Preston (eds.). Deformation of sediments and sedimentary rocks, Geological Society of London Special Publication, v.29, p.77 - 87.

Maltman, A.J., 1988. The importance of shear zones in naturally deformed wet sediments. Tectonophysics, v.145., p.163 - 175.

Maltman, A.J., 1994. Introduction and overview. In, Maltman, A.J. 1994. (ed.) The geological deformation of sediments. Chapman and Hall, London. p.1 - 35.

Maltman, A., T.Byrne, D.Karig, S.Lallemant and Leg 131 Shipboard Party, 1992. Structural geological evidence from O.D.P. Leg 131 regarding fluid flow in the Nankai prism, Japan. Earth and Planetary Science Letters, v.109, p.463 - 468.

Maltman, A.J., T.Byrne, D.E.Karig, S.Lallemant, R.Knipe and D.Prior, 1993a. Deformation structures at site 808, Nankai accretionary prism, Japan. In, Hill, I.A., A.Taira, J.V.Firth et al., 1993. Proceedings of the ocean drilling program, scientific results, v.131, p.123 - 133.

Maltman, A.J., T.Byrne, D.E.Karig and S.Lallemant, 1993b. Deformation at the toe of an active accretionary prism: synopsis of results from O.D.P. Leg 131, Nankai, S.W. Japan. Journal of Structural Geology, v.15 (8), p.949 - 964.

Matley, C.A., 1936. A 50ft. coastal terrace and other late-glacial phenomena in the Llyn peninsula. Proceedings of the Geological Association, v.47 (3), p.221-33.

May, R.W., 1980. The formation and significance of irregularly shaped quartz grains in till. Sedimentology, v.27 (3), p.325-331.

M^cCabe, A.M. and G.F.Dardis, 1994. Glaciotectonically induced water-throughflow structures in a Late Pleistocene drumlin, Kanrawer, County Galway, western Ireland. Sedimentary Geology, v.91, p.173 - 190.

- M^cCarroll, D. and C.Harris, 1992. The glacial deposits of Western Lley, North Wales: terrestrial or marine? *Journal of Quaternary Science*, v.7 (1), p.19 - 29.
- M^cConnachie, I., 1974. Fabric changes in consolidated kaolin. *Géotechnique*, v.24 (2), p.207 - 222.
- Meer, J.J.M. van der, 1987a. Field trip 'Tills and end moraines in The Netherlands and N.W.Germany'. In, Van der Meer, J.J.M. (ed), *Tills and glaciotectionics*. Balkema, Rotterdam. p.261 - 268.
- Meer, J.J.M. van der, 1987b. Micromorphology of glacial sediments as a tool in distinguishing genetic varieties of till. *Geological Survey of Finland Special Paper*, v3, p.77 - 89.
- Meer, J.J.M. van der, 1993. Microscopic evidence of subglacial deformation. *Quaternary Science Reviews*, v.12 (7), p.553 - 587.
- Meer, J.J.M. van der, M.Rappol and J.N.Semeijn. 1985. Sedimentology and genesis of glacial deposits in the Goudsberg, Central Netherlands. *Mededelingen van de Rijks Geologische Dienst*, v.39 (2), p.1 - 29.
- Melmore, S., 1935. *The glacial geology of Holderness and the Vale of York*. T.Buncle & Co. 96pp.
- Menzies, J., 1986. Inverse-graded units within till in drumlins near Caledonia, southern Ontario. *Canadian Journal of Earth Science*, v.23 (3), p.774 - 786.
- Menzies, J., 1990. Brecciated diamictons from Mohawk Bay, S.Ontario, Canada. *Sedimentology*, v.37 (3), p.481 - 493.
- Menzies, J. and A.J.Maltman, 1992. Microstructures in diamictons - evidence of subglacial bed conditions. *Geomorphology*, v.6 (1), p.27 - 40.

Mesri, G. and R.E.Olson, 1971. Mechanisms controlling the permeability of clays. *Clays and Clay Minerals*, v.19, p.151 - 158.

Moore, C.J., 1989. Tectonics and hydrogeology of accretionary prism: role of the décollement zone. *Journal of Structural Geology*, v.11 (1/2), p.95 - 106.

Moore, D.E., R.Summers and J.D.Byerlee, 1986. The Effects of Sliding Velocity on the Frictional and Physical Properties of Heated Fault Gouge. *Pure and Applied Geophysics*, v.124 (1/2), p.31 - 52.

Morgenstern, N.R. and J.S.Tchalenko, 1967. Microscopic structures in kaolin subjected to direct shear. *Géotechnique*, v.17 (3), p.309 - 328.

Mücher, H.J., 1985. Micromorphological study of the Terrace Sands (unit 4) and "loams" (unit 5) and their paleosols in the Belvédère pit near Maastricht, Southern Limbourg, the Netherlands. *Mededelingen Rijks Geologische Dienst*, v.39 (1), p19 - 29.

Mühlhaus, H.-B. and I.Vardoulakis, 1987. The thickness of shear bands in granular materials. *Géotechnique*, v.37 (3), p.271 - 283.

Murray, T., 1990. Deformable glacier beds: measurement and modelling. Unpublished PhD thesis, University of Wales, Aberystwyth. 321pp.

Murray, T., in press. Conditions at the glacier bed: assessing the paradigm shift.

Murray, T. and J.A.Dowdeswell, 1992. Water throughflow and the effects of deformation on sedimentary glacier beds. *Journal of Geophysical Research*, v.97 (B6), p.8993 - 9002.

Nasuno, S., A.Kudrolli, and J.P.Gollub. 1997. Friction in granular layers: hysteresis and precursors. *Physical Review Letters*, v.79 (5), p.949 - 952.

North, F.J., 1943. Centenary of the glacial theory. Proceedings of the Geologists' Association, v.LIV (1), p.1 - 28.

Nyborg, M.R., 1989. A model for the Relationship between the hydraulic Conductivity and Primary Sedimentary Structures of Till. Nordic Hydrology, v.20 (3), p.137 - 152.

Ostry, R.C. and R.E.Deane, 1963. Microfabric analyses of till. Bulletin of the Geological Society of America, v.74 (2), p.165 - 168.

Owen, L.A. and E.Derbyshire, 1988. Glacially deformed diamictos in the Karakoram Mountains, northern Pakistan. In, D.G.Croot (ed.) Glaciotectonics: Forms and Processes. A.A.Balkema, Rotterdam. p.149 - 176.

Paré, J.-J., N.S.Verma, A.A.Loisselle and S.Pinziariu, 1984. Seepage through till foundations of dams of the Eastmain - Opinace - La Grande diversion. Canadian Geotechnical Journal, v.21, p.75 - 91.

Paterson, W.S.B., 1981. The physics of glaciers (second edition). Pergamon Press, Oxford. 385pp.

Paterson, W.S.B., 1994. The physics of glaciers (third edition). Pergamon Press, Oxford. 480pp.

Paul, M.A. and N.Eyles, 1990. Constraints on the preservation of diamict facies (meltout tills) at the margins of stagnant glaciers. Quaternary Science Reviews, v.9 (1), p.51 - 69.

Philip, J.R.,1980. Thermal fields during regelation. Cold Regions Science and Technology, v.3, p.193 - 203.

Platt J.P., and R.L.M.Vissers, 1980. Extensional structures in anisotropic rocks. Journal of Structural Geology, v.2 (4), p.397 - 410.

Porter, R.P., 1997. Glacier surging: subglacial sediment deformation and ice-bed coupling. Unpublished Ph.D. thesis, University of Leeds. 210pp.

Porter, P.R., T.Murray and J.A.Dowdeswell, 1997. Sediment deformation and basal dynamics beneath a glacier surge-front: Bakaninbreen, Svalbard. *Annals of Glaciology*, v.24, p.21 - 26.

Price, N.J. and J.W.Cosgrove. 1990. *Analysis of Geological Structures*. Cambridge University Press, Cambridge.

Rieke, H.H., III. and G.V.Chilingarian. 1974. *Compaction of argillaceous sediments*. Developments in Sedimentology. 16. Elsevier, Amsterdam. 424pp.

Ronnert, L. and D.M.Mickelson, 1992. High porosity of basal till at Burroughs glacier, southeastern Alaska. *Geology*, v.20 (9), p.849 - 852.

Roscoe, K.H., 1970. The influence of strains in soil mechanics. *Géotechnique*. v.20 (2), p.129 - 170.

Rose, J., 1985. The Dimlington Stadial/Dimlington Chronozone: a proposal for naming the main glacial episode of the Late Devensian in Britain. *Boreas*, v.14 (3), p.225 - 230.

Rutter, E.H., R.H.Maddock, S.H.Hall and S.H.White, 1986. Comparative Microstructures of Natural and Experimentally Produced Clay-Bearing Fault Gouges. *Pure and Applied Geophysics*, v.124 (1/2), p.3 - 29.

Sammis, C., G.King and R.Biegel, 1987. The kinematics of Gouge Deformation. *Pure and Applied Geophysics*, v.125 (5), p.777 - 812.

Saunders, G.E., 1968. A reappraisal of glacial drainage phenomena in the Lleyn peninsula. *Proceedings of the Geologists Association*, v.79 (3), p.305 - 324.

Sheppard, J.A., 1957. The medieval meres of Holderness. *Transactions of the Institute of British Geography*, v.23 (1), p.75 - 86.

Shimamoto, T. and J.M.Logan, 1981. Effects of Simulated Fault Gouge on the Sliding Behavior of Tennessee Sandstone: Nonclay Gouges. *Journal of Geophysical Research*, v.86 (B4), p.2902 - 2914.

Shoemaker, E.M., 1988. On the formulation of basal debris drag for the case of sparse debris. *Journal of Glaciology*, v.34 (118), p.259 - 264.

Simpson, C. and S.M.Schmid, 1983. An evaluation of criteria to deduce the sense of movement in sheared rocks. *Bulletin of the Geological Society of America*, v.94 (11), p.1281 - 1288.

Sitler, R.F. and C.A.Chapman, 1955. Microfabrics of till from Ohio and Pennsylvania. *Journal of Sedimentary Petrology*, v.25 (4), p.262 - 269.

Sole-Benet, A., M.A.Marques and E.Mora, 1964. Injection features in mid-altitude Mediterranean soils. In, A. Jongerius (ed.). *Soil micromorphology*. Elsevier, Amsterdam. p.227 - 233.

Stephenson, E.L., A.J.Maltman and R.J.Knipe, in press. Fluid flow in actively deforming sediments: "Dynamic permeability" in accretionary prisms.

Straw, A., 1961. The erosion surfaces of East Lincolnshire. *Proceedings of the Yorkshire Geological Society*, v.33 (8), p.149 - 172.

Summers, R. and J.Byerlee, 1977. A note on the effect of fault gouge composition on the stability of frictional sliding. *International Journal of Rock Mechanics, Mining Science and Geomechanics (abstracts)*, v.14(3), p.155 - 160.

- Talbot, C.J. and V.von Brunn., 1987. Intrusive and extrusive (micro)melange couplets as distal effects of tidal pumping by a marine ice sheet. *Geological Magazine*, v.124 (6), p.513 - 525.
- Tchalenko, J.S., 1968. The evolution of kink-bands and the development of compressional textures in sheared clays. *Tectonophysics*, v.6 (2), p.159 - 174.
- Tchalenko, J.S., 1970. Similarities between shear zones of different magnitude. *Bulletin of the Geological Society of America*, v.81 (6), p.1625-1640.
- Thomas, G.S.P., 1984. The origin of the glacio-dynamic structure of the Bride Moraine, Isle of Man. *Boreas*, v.13 (3), p.355 - 364.
- Tucker, M.E., 1991. *Sedimentary petrology*. Backwell Scientific, London. 260pp.
- Valentin, H., 1957. *Glazialmorphologische Untersuchungen in Ostengland*. Abhandlungen der Geographische Institut der Freien Universitat, Berlin, v.4, p.1 - 86.
- Vickers, B., 1983. *Laboratory work in soil mechanics*. Granada Publishing, London. 170pp.
- Walder, J.S. and A.Fowler, 1994. Channalized drainage over a deformable bed. *Journal of Glaciology*, v.40 (134), p.3 - 15.
- Wateren, F.M. van der, 1986. Structural geology and sedimentology of the Dammer Berge push moraine, FRG. In, Van der Meer, J.J.M. (ed), *Tills and glaciotectonics*. Balkema, Rotterdam. p.157 - 182.
- Weertman, J., 1957. On the sliding of glaciers. *Journal of Glaciology*, v.3 (21), p.33 - 38.
- Weertman, J., 1964. The theory of glacial sliding. *Journal of Glaciology*, v.5 (39), p.287 - 303.

Weertman, J., 1972. General theory of water flow at the base of a glacier or ice sheet. *Reviews of Geophysics and Space Physics*, v.10 (1), p.287 - 333.

Weertman, J., 1979. The unsolved general glacier sliding problem. *Journal of Glaciology*, v.23 (89), p.97 - 115.

Whalley, W.B., 1996. Scanning electron microscopy. In, J.Menzies (ed). *Past glacial environments, sediments, forms, and techniques*. Butterworth-Heinemann, Oxford. p.357 - 375.

White, S.H., S.E.Burrows, J.Carreras, N.D.Shaw, and F.J.Humphreys, 1980. On mylonites in ductile shear zones. *Journal of Structural Geology*, v.2 (1/2), p.175 - 187.

Wood, S.V. and J.L.Rome, 1868. On the glacial and postglacial structure of Lincolnshire and south-east Yorkshire. *Quarterly Journal of the Geological Society of London*, v.24, p.146 - 184.

Znidarcic, D. and S.A.Aiban, 1988. Discussion on "Some measurements of the permeability of kaolin." by Al-Tabbaa, A. and D.Muir Wood. *Géotechnique*, v.38 (3), p.453 - 454.