

ANDREW DAWSON

PUBLICATIONS

- 1 Bradley, D. & Dawson, A.R., "Computer aided design of transmission lines", *Proc. Universities Power Engineering Conf.*, 1978.
- 2 Cox, D.W. & Dawson, A.R., "The use of small scale trial compactions for earthwork design", in Site Investigation Practice: Assessing BS5930, Proc. 20th Reg. Meeting of Eng. Group Geol. Soc., Vol. 1, 1984, pp 109-119 (republished in one volume: "*Site Investigation Practice Assessing BS5930*", Geol. Soc., London, 1986).
- 3 Cox, D.W., Dawson, A.R. & Hall, J.W.H., "Techniques for site investigation using trial pits", *ibid*, 1984, pp 120-131.
- 4 Dawson, A.R., Contributions to discussion, *ibid*, 2, 1984, p30 and p150.
- 5 Dawson, A.R., "Water movements in road pavements", *Proc. 2nd Symp. on Unbound Aggregates in Roads* (UNBAR2), Dept. of Civil Eng., Univ. of Nottingham, 1985, pp 7-12.
- 6 Dawson, A.R., "Ground anchorages - case histories", *Proc. Inst. Civil Engrs.*, Pt.1, Vol. 78, Dec. 1985, pp 1500-1503.
- 7 Dawson, A.R., Contribution to discussion, "*Failures in Earthworks*", Thomas Telford, London, 1985, pp 393-394.
- 8 Dawson, A.R., "*Pavement foundations*", Lecture H in Bituminous Pavements: Materials, Design and Evaluation, Dept. of Civil Eng., Univ. of Nottingham, 1986.
- 9 Dawson, A.R., "The role of geotextiles in controlling sub-base contamination", *Proc. 3rd Int. Conf. Geotextiles*, Vienna, II, 1986, pp 593-598.
- 10 Brown, S.F., Dawson, A.R. & Barksdale, R.D., "Innovations for pavement foundations", Inst. Of High. and Transp., *National Workshop on Design and Construction of Pavement Foundations*, Leamington Spa, March 1987, pp 121-141.
- 11 Dawson, A.R., Jones, R.H., Lee, R.G., O'Reilly, M.P., Selig, E.T., Tam, W-S. & Thom, N.H., Prediction to "*Stanstead Abbotts trial embankment prediction symposium*", King's College, London, 1987.
- 12 Dawson, A.R., "Ground anchorages: an introduction", *Proc. Inst. Civil Engrs.*, Pt.1, Vol. 82, June 1987, pp 587-589.
- 13 Brown, S.F. & Dawson, A.R., "The effects of groundwater on pavement foundations", *Proc. IX European Conf. Soil Mech. and Found. Eng.*, 2, 1987, pp 657-660.
- 14 Dawson, A.R., Contribution to discussion, *Proc. IX European Conf. Soil Mech. and Found. Eng.*, *ibid*, 1988, Vol. 3.
- 15 Dawson, A.R., "*Introduction to soils and granular materials*", Lecture G in Bituminous Pavements: Materials Design and Evaluation, Dept. of Civil Eng., Univ. of Nottingham, 1988.
- 16 Dawson, A.R., "*Pavement Foundations*", Lecture H, *ibid*, 1988.
- 17 Dawson, A.R. & Lee, R.G., "Full scale foundation trials on grid-reinforced clay", *Geosynthetics for Soil Improvement*, Ed. Holtz R, ASCE *Geotechnical Special Publication No. 18*, 1988, pp 127-

147.

- 18 Dawson, A.R., Brown, S.F. & Barksdale, R.D., "Pavement foundation developments", *Jnl. of Inst. of Highways and Transportation*, **36** (3), March 1989, pp 27-34.
- 19 Dawson, A.R. & Gomes Correia, A., "The effects of stress and pore water pressure states on the resilient properties of granular materials", *12th Int. Conf. Soil Mechanics & Foundation Eng.*, Balkema, 1989, pp 701-705.
- 20 Jones, R.H. & Dawson, A.R. (editors), "Unbound Aggregates in Roads", 1989, Butterworths.
- 21 Dawson, A.R., "General report: The specification of granular materials for unbound pavement layers", in *Unbound Aggregates in Roads*, eds Jones, R.H. & Dawson, A.R., Butterworths, 1989, pp 17-26.
- 22 Dawson, A.R., "The degradation of Furnace Bottom Ash under compaction", *ibid*, 1989, pp 169-179.
- 23 Dawson, A.R. & Jones, R.H., "Conclusion and recommendations for the use of unbound aggregates in roads", *ibid*, 1989, pp 413-415.
- 24 Jones, R.H. & Dawson, A.R., "Introduction", *ibid*, 1989, pp 1-2.
- 25 Dawson, A.R. & Thom, N.H., "Field tests on pavement materials", in *Field Testing in Engineering Geology*, ed. Bell, F.G., Culshaw, M.G., Cripps, J.C. & Coffey, J.R., *Eng. Geol. Sp. Publn. No 6*, Geol Soc, London, 1990, pp 137-143.
- 26 Lee, R.G., Dawson, A.R. & Jones, R.H., "Use of instrumentation in determining full-scale trial foundation performance". *Geotechnical Instrumentation in Practice*, Thomas Telford, 1990, pp 209-225.
- 27 Dawson, A.R. & Little, P.H., "Reinforced haul-roads:- trials at Bothkennar, Scotland", *Proc. 4th Int. Conf. on Geotextiles Geomembranes and Related Products*, Balkema, **1**, 1990, p 250.
- 28 Jones, R.H., Lee, R.G. & Dawson, A.R., "Full-scale trials of grid reinforced soil foundations on alluvium", in *Quaternary Engineering Geology*, *Eng. Geol. Sp. Publn. No. 7*, eds. Forster, A., Culshaw, M.G., Cripps, S.C., Little, J.A. & Moon, C.F., Geol. Soc., London, 1991, pp 643-649.
- 29 Jones, R.H., Dawson, A.R. & Lee, R.G., "Reinforced soil foundations for buildings", *Performance of Reinforced Soil Structures*, Thomas Telford, 1991, pp 477-8.
- 30 Bell, H., Dawson, A.R., Baker, C.J. & Wright, C.J., "The question of tree stability", in Research for Practical Arboriculture 1991, ed. Hodge, S.J., Forestry Commission, *Bulletin No 97*, HMSO, London, 1991, pp 94-100.
- 31 Dawson, A.R. & Bullen, F., "Furnace Bottom Ash - its engineering properties and its use as a sub-base", *Proc. Inst. Civil Engineers*, **90**, Oct 1991, pp 993-1009.
- 32 Brown, S.F. & Dawson, A.R., "Two-stage approach to asphalt pavement design", *Proc. 7th Int. Conf. on Asphalt Pavements*, Nottingham, June 1992, **1**, pp 16-34.
- 33 Dawson, A.R. & Brunton, J.M., "SDMWIN" computer program for pavement design, Univ. of Nottingham, Dept. of Civil Eng., 1992.
- 34 Dawson, A.R. & Gomes Correia, A., "The effects of subgrade clay condition on the structural behaviour of road pavements", in *Flexible Pavements*, ed. Gomes Correia, A., Balkema, Rotterdam, 1996, pp 113-120.
- 35 Dawson, A.R., Paute, J.L. & Thom, N.H., "Mechanical characteristics of unbound granular materials as a function of condition", in *Flexible Pavements*, ed. Gomes Correia, A., Balkema, Rotterdam, 1996, pp 35-45.
- 36 Dawson, A.R. & Plaistow, L.C., "Parametric study of flexible pavements", in *Flexible Pavements*,

- ed. Gomes Correia, A., Balkema, Rotterdam, 1996, pp 229-228.
- 37 Galjaard, P.J., Paute, J.L., Dawson, A.R. & Gillett, S.D., "Comparison and performance of repeated load triaxial test equipment for unbound granular materials", in *Flexible Pavements*, ed. Gomes Correia, A., Balkema, Rotterdam, 1996, pp 7-21.
- 38 Paute, J.L., Dawson, A.R. & Galjaard, P.J., "Recommendations for repeated load triaxial test equipment and procedure for unbound granular materials", in *Flexible Pavements*, ed. Gomes Correia, A., Balkema, Rotterdam, 1996, pp 23-34.
- 39 Thom, N.H. & Dawson, A.R., "The permanent deformation of a granular material modelled using hollow cylinder testing", in *Flexible Pavements*, ed. Gomes Correia, A., Balkema, Rotterdam, 1996, pp 65-80.
- 40 Dawson, A.R. & Nunes, M.C.M., "Some British experience of the behaviour of furnace bottom ash and slate waste for pavement foundations", in Proc. Fed. Highways Admin. Conf. *Discarded Materials and By Products for Construction of Highway Facilities*, Denver, U.S.A., 1993, pp 4-1 – 4-13.
- 41 Karaşahin, M., Dawson, A.R. & Holden, J.T., "The Applicability of Resilient Constitutive Models of Granular Materials for Unbound Base Layers", *Jnl. Transportation Research Board 1406*, 1994, pp 98-107.
- 42 Kamal, M.A., Dawson, A.R., Farouki, O.T., Hughes, D.A.B. & Sha'at, A.A., "Field and Laboratory evaluation of the mechanical behaviour of unbound granular materials in pavements", *Jnl. Transportation Research Board 1406*, 1994, pp 88-97.
- 43 Dawson, A.R., "Prediction of in-situ mechanical properties of unbound aggregates - is it possible?", Paper presented to 2nd Annual meeting, Center for Aggregates Research, Texas A&M University, 1994.
- 44 Karaşahin, M. & Dawson, A.R., "Resilient characteristics of cohesionless soil", *Proc. 13th Int. Conf. Soil Mechanics & Foundation Engineering*, New Delhi, India, Balkema, 4, 1994, pp 1827-1830.
- 45 Dawson, A.R. & Thom, N.H., "PAFODE" computer program for pavement foundation design, Univ. of Nottingham, Dept. of Civil Eng., 1994.
- 46 Dawson, A.R., "Comparing unbound aggregate mixes - Is well-graded always the best choice?", *Aggregate Views*, 2 (3), 1994, pp 6-7.
- 47 Roodbaraky, H.J., Baker, C.J., Dawson, A.R. & Wright, C.J., "Experimental observations of the aerodynamic characteristics of urban trees", *Jnl. of Wind Eng. & Industrial Aerodynamics*, 52, 1994, pp 171-184.
- 48 Dawson, A.R., Little, P.H. & Brown, S.F., "Rutting behaviour in geosynthetic-reinforced unsurfaced pavements", *Proc. 5th Int. Conf Geotextiles, Geomembranes & Related Products*, Singapore, 1, 1994, pp 143-146.
- 49 Dawson, A.R., Gomes Correia, A., Jouye, P., Paute, J-L. & Galjaard, P.J., "Modelling resilient and permanent deflections in granular and soil pavement layers", *Proc. 4th Int. Conf. Bearing Capacity of Roads & Airfields*, Minneapolis, Vol. 2, 1994, pp 847-861.
- 50 Dastich, I. & Dawson, A.R., "Techniques for assessing the non-linear response of unbound granular layered structures", *ASTM Geotechnical Testing Journal*, 18 (1), March, 1995, pp 50-57.
- 51 Dawson, A.R., Elliott, R.C., Rowe, G.M. & Williams, J., "An assessment of the suitability of some industrial by-products for use in UK pavement bases", *Jnl. Transportation Research Board no 1486*, pp 114-123, 1995.

- 52 Dawson, A.R., "The unbound granular base", Keynote paper, Center for Aggregates Research, 3rd Annual Symposium, Austin, Texas, March 1995.
- 53 Dawson, A.R. & Jones, R.H. (Eds.), "Unbound aggregates in roads", Proc. UNBAR4, Dept. Civil Eng'ng, Univ. Nottingham, 1995, 365 pp
- 54 Plaistow, L. & Dawson, A.R., "Non-linear aggregate behaviour in flexible pavements", in *Unbound Aggregates in Roads*, Eds. Dawson, A.R. & Jones, R.H., Dept. Civil Eng'ng, Univ. Nottingham, 1995
- 55 Lekarp, F., Richardson, I.M. & Dawson, A.R., "Influences on permanent deformation behaviour of unbound granular materials", *Jnl. Transportation Research Board*, No. 1547, pp. 68-75, 1996.
- 56 Nunes, M.C.M., Bridges, M.G. & Dawson, A.R., "Assessment of secondary materials for pavement construction : technical and environmental aspects", *Waste Management*, Vol. 16, Nos 1-3, 1996, pp. 87-96.
- 57 Dawson, A.R., "European developments in testing methods to improve performance of aggregates", Center for Aggregates Research, 4th Annual Symposium, Atlanta, April 1996, 15pp.
- 58 Dawson, A.R. & Little, P.H., "The measurement of stress and strain in an unsurfaced haul road at a soft clay site in Scotland", *Jnl. Transportation Research Board*, No. 1596, pp 15-22, 1997.
- 59 Nunes, M.C.M. & Dawson, A.R., "Behaviour of some pavement foundation materials under repeated loading", *Jnl. Transportation Research Board*, No. 1577, pp 1-9, 1997.
- 60 Dawson, A.R., "Rutting in unsurfaced roads - materials and structure interaction effects", *Proc. Symposium on Thinly Surfaced Pavements*, Univ. New Brunswick, Fredericton, Canada, pp. 101-108, 1997.
- 61 Lekarp, F. & Dawson, A.R., "Analysis of permanent deformation behaviour of unbound granular materials", *ibid*, 1997, pp. 91-99.
- 62 Hill, A.R., Dawson, A.R. & Nunes, M.C.M., "Assessing the impact of treated wastes and by-products in pavement foundations", *Proc. 6th Annual East Midlands Advisory Group on the Environment Conf.*, July 1997.
- 63 Hill, A.R., Dawson, A.R. & Nunes, M.C.M., "Benefits and difficulties of using foundry sands and other secondary materials in road construction", *Proc. Foundry Products Conf.*, November 1997.
- 64 Lekarp, F. & Dawson, A.R., "Modelling permanent deformation behaviour of unbound granular materials", *Construction and Building Materials*, 12 (1), 1998, pp 9-18.
- 65 Dawson, A.R. & Gillett, S.D., "Assessment of on-sample instrumentation for repeated load triaxial tests", *Jnl. Transportation Research Board*, No. 1614, 1998, pp 52-60.
- 66 Heelis, M.E., Dawson, A.R., Chapman, D.N., Krylov, V.V. & Collop, A.C., "Predictions of vertical track displacements caused by the passage of high speed trains over soft soils", Proc. 10th Int. Scientific Conf., "Communications on the edge of the millenium", Univ. Žilina, Žilina, Slovakia, September, 1998.
- 67 Sharpe, P., Collop, A.C. & Dawson, A.R., "Applying engineering principles to optimise permanent way performance", in *Infrastructure Issues*, Inst. Mech. Eng'ng. Seminar Publication 1998-23, Prof. Eng'ng. Publ'ns. Ltd., 1998, pp 29-38.
- 68 Johnston, A.G., Dawson, A.R., Moon, J.R. & Brown, G.J., "Preliminary investigation into the reclamation and re-use of aggregates and binders from concrete waste", *Proceedings of the*

- 20th Canadian Waste Management Conference, 21-24 September 1998, Hamilton, Ontario.
- 69 Dawson, A.R. & Hill A.R., "Prediction and implication of water régimes in granular bases and sub-bases", *Proc. Int. Symp. On Subdrainage in Roadway Pavements and Subgrades*, Granada, Spain, 1998, pp 121-128.
- 70 Fleming, P., Rogers, C.D.F., Frost, M.W. & Dawson, A.R., "Subgrade equilibrium water content and resilient modulus for UK clays", *Proc. Int. Symp. On Subdrainage in Roadway Pavements and Subgrades*, Granada, Spain, 1998, pp359-366.
- 71 Dawson, A.R., Numrich, R. & Lekarp, F., "Rutting in granular pavement layers", *Kolloquium Prüfung und Bewertung von Konstruktionsschichten im Straßenbau*, 21 & 22 July, Dresden, Germany, Technische Universität Dresden, Fakultät Bauingenieurwesen, Heft 8, 1998, pp 415-428.
- 72 Johnston, A.G., Dawson, A.R. & Brown, G.J., "Recycled concrete aggregate: an alternative concept", *Use of Recycled Concrete Aggregate*, ed. Dhir, R.K., Henderson, N.A. & Limbachiyia, M.C., Thomas Telford, 1998, pp 31-44.
- 73 Heelis, M.E., Dawson, A.R., Chapman, D.N., Collop, A.C. & Krylov, V.V., "Resilient modulus of soft soil beneath high speed rail lines", *Jnl. Transportation Research Board*, No. 1689, 1999, pp 39-46.
- 74 Heelis, M.E., Collop, A.C., Dawson, A.R., Chapman, D.N. & Krylov, V.V., "Transient effects of high speed trains crossing soft soil", *Proc. 12th Eur. Conf. Soil Mech. & Geotech. Eng.*, 3, Balkema, Amsterdam, 1999, pp 1809-1814.
- 75 Dawson, A.R., "Implications of granular material characteristics on the response of different pavement constructions", in "Unbound Granular Materials - Laboratory testing, in-situ testing and modelling", ed. Gomes Correia, A., (Proc. Symp. Modelling & Advanced Testing for Unbound Granular Materials), Balkema, 1999, pp 221-226.
- 76 Huhtala, M., Dawson, A.R. & Mundy, M., "Unbound granular materials for road pavements, COST-337 and COURAGE", *Proc. 2nd European Road Research Conf.*, Brussels, 7-9th June, 1999.
- 77 Heelis, M.E., Collop, A.C., Dawson, A.R., Chapman, D.N. & Krylov, V.V., "Predicting and measuring vertical track displacements on soft subgrades", *Proc. Int'l. Conf. Railway Eng.*, London, 25-26th May, 1999.
- 78 Hill, A.R. & Dawson, A.R., "Environmental assessment of alternative materials for road construction", *Underground*, Environmental Agency, April 1999, pp5-6.
- 79 Janoo, V., Irwin, L., Knuth, K., Dawson, A.R. & Eaton, R., "Use of inductive coils to measure dynamic and permanent pavement strains", *Proc. Accelerated Pavement Testing Conf.*, Reno, Nevada, USA, 1999.
- 80 Evans, J.C. & Dawson, A.R., "Slurry walls for control of contaminant migration - a comparison of UK and US practices", in 'Geo-Engineering for Underground Facilities', American Soc. Civil Eng'rs Special Pub'l. 90, June, 1999, pp 105-120.
- 81 Lekarp, F., Isacsson U & Dawson, A.R., "State of the Art. I: Resilient response of unbound aggregates", American Soc. Civil Eng'rs J'n'l. Transp. Eng., 126 (1), Jan/Feb, 2000, pp 66-75.
- 82 Lekarp, F., Isacsson U & Dawson, A.R., "State of the Art. II: Permanent strain response of unbound aggregates", American Soc. Civil Eng'rs J'n'l. Transp. Eng., 126 (1), Jan/Feb, 2000, pp 76-84.
- 83 Atkinson, V.M., Chaddock, B.C. & Dawson, A.R., "Enabling the use of secondary aggregates and binders in pavement foundations", TRL Report 408, Transport Research Laboratory, Crowthorne, UK, 1999, 31pp. ISSN 0968-4107.

- 84 York, D., Hill, A.R., Taylor, J.V., Dawson, A.R. & Hall, S., "Environmental Assessment of Road Construction Materials", Britpave Seminar 'A greener way ahead', October 1999.
- 85 Dawson, A.R., Mundy, M.J. & Huhtala, M., "European research into granular material for pavement bases and sub-bases", *Jnl. Transportation Research Board No. 1721*, 2000, pp 91-99.
- 86 Dawson, A.R., "Engineering the pavement base and sub-base", Proc. CSS Conference 'Value Engineering in Maintenance', November 1999, pp. 8-1 - 8-12.
- 87 Pamukcu, S., Dawson, A.R., Elton, D.J., Nicholson, P.G. & Sharma, S., "Soil and rock properties", Millenium Paper, Transportation Research Board, National Acadamies, 2000, Washington.
- 88 Krylov, V.V., Dawson, A.R., Heelis, M.E. & Collop, A.C., "Rail movement and ground waves caused by high-speed trains approaching track-soil critical velocities", Proc. Inst. Mech. Eng'rs, Part F, *Journal of Rail and Rapid Transit*, **214** (2), June, 2000, pp 107-116.
- 89 Hill, A.R. & Dawson, A.R., "Observations of leaching of low concentration contaminants from alternative aggregates in road construction", Proc. Waste Materials in Construction- *The Science and Engineering of Recycling for Environmental Protection*, 'WASCON 2000', 31 May-2 June, Harrogate, UK, Ed. Woolley, G.R., Goumans, J.J.J. & Wainwright, P.J., Elsevier Science Ltd., 2000, pp. 411-421.
- 90 Heelis, M.E., Collop, A.C., Dawson, A.R., Chapman, D.N., & Krylov, V.V., "The 'bow-wave' effect in soft subgrade beneath high speed rail lines", in "Performance Verification of Constructed Geotechnical Facilities", *Geotech. Eng. Special Publ'n.*, No. **94**, Am. Soc. Civil Eng'rs., Ed. AJ Lutenegger & DJ DeGroot, 2000, pp 338-349.
- 91 Dawson, A.R., (editor) "Unbound Aggregates in Road Construction", Balkema, Rotterdam, 2000
- 92 Karaşahin, M. & Dawson, A.R., "Anisotropic characteristics of granular materials", in "Unbound Aggregates in Road Construction", ed. Dawson, A.R., Balkema, Rotterdam, 2000, pp 139-144.
- 93 Mundy, M. & Dawson, A.R., "COURAGE – Demonstrating Efficient Use of Unbound Granular Materials in Pavement Construction", *20th ARRB Conference*, March, ARRB Transport Research, Vermont South, Australia, 2001.
- 94 Werkmeister, S., Dawson, A.R. & Wellner, F., "Permanent deformation behavior of granular materials and the shakedown theory", *Jnl. Transportation Research Board No. 1757*, pp 75-81, 2001.
- 95 Dawson, A.R., "Granular pavement materials ... Where are we?", in 'Towards Performance-Based Specifications for Unbound Granular Materials', *Research Report ARR 348*, 2002, pp 4-21 (given as a Keynote Paper to 20th ARRB Conference in Melbourne, Australia), ARRB Transport Research, Vermont South, Australia.
- 96 Hill, A.R., Dawson, A.R. & Mundy, M., "Utilisation of aggregate materials in road construction and bulk fill", *J. Resources, Conservation & Recycling*, **32** (3-4), July, 2001, pp 305-320.
- 97 Dawson, A.R., "Engineering the Forestry Road Pavement", *Annual Symposium*, Forestry Eng. Group of Inst. Agric. Eng.n'rs., Penrith, October, 2001, 14pp.
- 98 Arnold, G.K., Dawson, A.R., Hughes, D.A.B., Werkmeister, S. & Robinson, D., "Serviceability Design of Granular Pavement Materials", *Proc. 6th Int. Conf. Bearing Capacity of Roads, Railways and Airfields*, Lisbon, Vol. 2, pp.957-966, Balkema, Rotterdam, 2002.
- 99 Ruiz Rubio, A.A., Dawson, A.R., & Macdonald, R.A., "Current and Future Research Topics for Europe Identified by the COST 337 Action", *Proc. 6th Int. Conf. Bearing Capacity of Roads, Railways and Airfields*, Lisbon, 2002, **2**, Balkema, Rotterdam, pp.1041.

- 100 Arnold, G., Dawson, A.R., Hughes, D.A.B., & Robinson, D., "The Application of Shakedown Approach to Granular pavement layers", *Proc. 9th Int. Conf. Asphalt Pavements*, Copenhagen, Vol. 1, paper 6-5, Danish Road Directorate, Copenhagen, 2002.
- 101 Cheung, L.W. & Dawson, A.R., "Effects of Particle and Mix Characteristics on the Performance of some Granular Materials", *Jnl. Transportation Research Board*, No. 1787, pp. 90-98, 2002.
- 102 Werkmeister, S., Dawson, A.R. & Wellner, F., "Permanent Deformation Behaviour of Granular Materials", *Int. Jnl. Road Materials and Pavement Design*, 6, pp. 31-51, 2005.
- 103 Evans, J.C., Dawson, A.R. & Opdyke, S.M. "Slurry Walls for Groundwater Control: A Comparison of UK and US Practice," Proc. of the 19th Central Pennsylvania Geotechnical Seminar: *Current Trends in Geotechnical Engineering*, Hershey, PA, May, 2002.
- 104 Taylor, J.V., Dawson, A.R. & Hall, S., "Development of risk assessment methodology for use of alternative materials in road construction", Technical Note, ConSoil 2000, *Proc. 7th Int'l. FZK/TNO Conf. Contaminated Soil*, Leipzig, 2000, Vol. 2, Thomas Telford, London.
- 105 Killer, D., Paxton, S. & Dawson A.R., "Engineering and legislative options for improved timber haulage in Scottish forests - an inclusive stakeholder approach", *Jnl. Transportation Research Board*, No. 1819, (1), 2003, pp109-117.
- 106 Arnold, G., Hughes, D.A.B., Dawson, A.R. & Robinson, D., "Design of granular pavements", *Jnl. Transportation Research Board*, 1819, (2), pp194-200, 2003.
- 107 Werkmeister, S., Dawson, A.R. & Wellner, F., "Design concept of unbound granular layers in pavement constructions", *Proc. 21st ARRB (Australian Road Research Board)/ 11th REAAA Conference* in Cairns, ARRB Transport Research, Vermont South, Australia, 2003.
- 108 Dawson, A.R., Arnold, G. & Werkmeister, S., "Using a shakedown approach as a simple means of predicting rutting in unsealed and chip-sealed pavements", *Proc. 21st ARRB (Australian Road Research Board)/ 11th REAAA Conference* in Cairns, ARRB Transport Research, Vermont South, Australia, 2003.
- 109 Werkmeister, S., Numrich, R., Dawson, A.R. & Wellner, F., "Design of granular pavement layers considering climatic conditions", *Jnl. Transportation Research Board*, No. 1837, 2003, pp61-70.
- 110 Werkmeister, S., Numrich, R., Dawson, A.R., & Wellner, F., "Deformation behaviour of granular materials under repeated dynamic load", *Environmental Geomechanics* (ed. Vulliet, L, Laloui, L & Schrefler, B), 2002, Presses Polytechniques et Universitaires Romandes, Monte Verità.
- 111 Dawson, A.R., "Cumulative damage and its applicability to low volume road pavements", *Internationales Kolloquium Prüfung, Bewertung und Bemessung von Straßenbefestigungen*, Technische Universität Dresden, April 3-4, 2003.
- 112 Sear, L.K.A., Weatherley, A.J. & Dawson, A.R., "The environmental impacts of using fly ash - the UK producers' perspective", *Proc. International Ash Symposium*, Kentucky, 2003, October.
- 113 Dawson, A.R., Brown, S.F. & Little, P.H., "Accelerated load testing of unsealed and reinforced pavements", *2nd International Conference on Accelerated Pavement Testing*, Univ. Minnesota, Minneapolis, September 2004
- 114 Dawson, A.R. (editor) "Pavements Unbound", A A Balkema, Leiden, 2004, 369pp.
- 115 Arnold, G., Dawson, A.R., Hughes, D.A.B. & Robinson, D., "Deformation behaviour of granular pavements", in "Pavements Unbound", ed. Dawson, A.R., A A Balkema, Leiden, pp 169-77, 2004.

- 116 Werkmeister, S., Dawson, A.R. & Wellner, F., "Pavement Design Model for Unbound Granular Materials" *Am. Soc. Civil Eng'rs, Jnl. Transp. Eng.*, **130** (5), 2004, Sept-Oct, pp 665-674.
- 117 Dawson, A.R., Kolisoja, P. & Vuorimies, N., "Permanent Deformation Behaviour of Low Volume Roads in the Northern Periphery Areas", *Proc. 7th Int. Conf. Bearing Capacity of Roads, Railways and Airfields*, Tapir Uttrykk, 2005.
- 118 Thom, N.H., Edwards, J.P. & Dawson A.R., "A Practical Test for Laboratory Characterisation of Pavement Foundation Materials", *Proc. 13th Annual Symposium*, Int'l Center for Aggregates Research, Austin, TX., 2005.
- 119 Dawson, A.R & Boothroyd, P.G., "Drainage in Reality - a Survey of Practicing Engineers in the UK", *Proc. WIP'05, Symp. Water in Pavements*, CEDEX, Madrid, 2005
- 120 Hooper, B., Edwards, J.P., & Dawson A.R. (uncredited), "Making the best of byways", Dept. for Env., Food & Rural Affairs, December, 2005, 88pp.
- 121 Isola, R. & Dawson, A.R. "Aggregate Packing And Coordination Number – A Statistical Approach", *Proc. 3rd Int'l SII Conf.*, Società Italiana Infrastrutture Viarie, Bari, 2005
- 122 Dawson, A.R., Berntsen, G., Kolisoja, P., Johansson, S., Saarenketo, T. & Munro, R., "Developing Appropriate Engineering Responses to Seasonal Effects for Pavements Serving Remote Communities", in *Cold Regions Engineering 2006: Current Practice in Cold Regions Engineering*, ed. Davies, M. & Zufelt, J.E., 2006, Am. Soc. Civil Eng'rs., Reston, Virginia, pp 14.1-14.8. ISBN 0-7844-0836-X
- 123 Dawson, A.R., Hill, A.R. & Boothroyd, P., "The Hydraulic and Geo-Environmental Behavior of the Sub-Pavement Environment", *Geotech. Special Publ'n.*, No, 154, Am. Soc. Civil Eng'rs., Ed. by Huang, B., Meier, R., Prozzi, J. & Tutumluer, E., 2006, pp 287-295. ISBN: 0-7844-0866-1.
- 124 Korkiala-Tanttu, L. & Dawson, A.R., "Relating Full-Scale Pavement Rutting to Laboratory Permanent Deformation Testing", *Int'l. Jnl. Pavement Eng.*, **8** (1), March 2007, pp 19-28.
- 125 Hooper, R.L., Edwards, J.P., Elliott, R.C. & Dawson, A.R., "Leaching from recycled and secondary aggregates – a review", WRAP Report, Waste and Resource Action Programme, Banbury, March, 2004, 37 pp.
- 126 Korkiala-Tanttu, L. & Dawson, A.R., "Effects of Side-Slope on Low-Volume Road Pavement Performance – A Full-Scale Assessment", *Canadian Geotech. Jnl.*, **45**, 2008, pp 853-866.
- 127 Kolisoja, P., Dawson, A.R. & Saarenketo, T., "Management of Permanent Deformations on the Low Volume Roads of the Northern Periphery Areas", in *8th Int'l Symp. Cold Region Development*, ISCORD 2007, 3pp.
- 128 Peploe, R.J. & Dawson, A.R., "Environmental Impact of Industrial By-products in Road Construction - a Literature", *Research Report 308*, Land Transport New Zealand, Wellington, 2006, 38pp. ISBN 0-478-28720-8, ISSN 1177-0600.
- 129 Hooper, R., Kagga, T., Brown, J., Edwards, P. & Dawson, A.R., "The use of post-consumer tyres in public rights of way construction", *Proc. Sustainable Materials & Wastes Technologies Conf.*, Univ. Coventry, 2007.
- 130 Dawson, A.R., Kolisoja, P., Vuorimies, N. & Saarenketo, T., Design of low-volume pavements against rutting – a simplified approach, *Transportation Research Record*, **1989** (1), pp. 165-172, 2007.
- 131 Dawson, A.R. & Baltzer, S.U., "State-of-practice in prevention of water-borne pollution from pavements", *Int. Jn'l. Road Materials & Pavement Design*, **8** (4), 2007, pp 745-766.
- 132 Dawson, A.R., "Rut Accumulation in Low-Volume Pavements due to Mixed Traffic" , *Jnl.*

- Transportation Research Board, No. 2068, 2008, pp. 78-86.
- 133 Boothroyd, P., Dawson, A.R., Ma, J. & Hu, L., "2-Dimensional Numerical Simulation of Groundwater Contamination in the Highway Environment", *Int. Jnl. Pavement Eng'ng.*, Vol. 10., No. 4, 2009, pp. 265 - 276. DOI 10.1080/10298430802069475.
- 134 Brenčič, M., Dawson, A.R., François, A., Folkeson, L. & Leitão, T.E., "Strategies for mitigating road pollution of water bodies", *Proc. Transport Research Arena*, paper 11.1.4, 2008, Ljubljana.
- 135 Dawson, A.R., Schulz, S., Hess, R., Windsor, P. & Batchelor, A., "Treatment and recycling of soil and aggregates of trench excavations", *Proc. Dresdner Tief- und Straßenbaukolloquium: Prüfung, Bewertung und Dimensionierung von Straßen und Anlagen des städtischen Tiefbaus*, TU Dresden (3 - 4. April), 2008.
- 136 Ellis, E., Yu, H-S., McDowell, G., Dawson, A.R. & Thom, N. (eds.), "Advances in Transportation Geotechnics", CRC Press, 2008, 786pp. ISBN 978-0-415-47590-7.
- 137 Arnold, G., Arnold, D., Dawson, A.R., Hughes, D., Robinson, D., Werkmeister, S., Alabaster, D., Ellis, J. & Ashby, R., "Rut depth prediction of granular pavements using the repeated load triaxial apparatus and application in New Zealand specifications for granular materials", in "Advances in Transportation Geotechnics", ed. Ellis, E., Yu, H-S., McDowell, G., Dawson, A.R. & Thom, N, CRC Press, 2008, pp 66-71.
- 138 Brito, L.A.T. Dawson, A.R. & Tyrrell, R.W.W., "Pavement Trials at Ringour Quarry: Evaluating rutting in forest roads in Southern Scotland", in "Advances in Transportation Geotechnics", ed. Ellis, E., Yu, H-S., McDowell, G., Dawson, A.R. & Thom, N, CRC Press, 2008, pp. 81-87.
- 139 Dawson, A.R. (ed. & principal author), "Water in Road Structures", Springer, Dordrecht, 2008, 356pp + Appendices. ISBN 978-1-4020-8561-1. DOI 10.1007/978-1-4020-8562-8.
- 140 Dawson, A.R., "Who needs APT?", Closing keynote to *3rd Accelerated Pavement Testing Conference*, Madrid, 2008, 11pp.
- 141 Brito, L.A.T., Dawson, A.R. & Kolisoja, P.J., "Analytical Evaluation of Unbound Granular Layers in Regard to Permanent Deformation", proc. *8th Int. Conf. Bearing Capacity of Roads, Railways and Airfields*, Urbana-Champaign, Illinois, 2010, 10pp.
- 142 Moghaddas Tafreshi, S.N. & Dawson, A.R. "Comparison of bearing capacity of a strip footing supported on sand reinforced with 3D and with planar geotextile", *Geotextiles & Geomembranes*, 28 (1), 2010, pp, 72-84.
- 143 Dawson, A.R., Khan, R., Collop, A.C. & Yang, L., "X-Ray CT to characterize UK asphalt mixtures in a wheel track test", *9th Int'l Conf. Sustainable Construction Materials & Technology in Asphalt, Pavement Eng'r'g & Highways Maintenance*, Liverpool John Moores Univ., 2010.
- 144 Carrera, A., Grenfell, J., Dawson, A.R. & Proctor, J., "On-site recycling of trench arisings for pavement reinstatement", *Proc. 2nd Conf. Sustainable Construction Materials & Technologies*, 3, June 28-30, 2010, pp. 1365-74.
- 145 Moghaddas Tafreshi, S.N. & Dawson, A.R. "Behaviour of footings on reinforced sand subjected to repeated loading - comparing use of 3D and planar geotextile", *Geotextiles & Geomembranes*, 28 (5), 2010, pp. 434- 447. [rated in the top 25 papers in 2011]
- 146 Flintsch, G., Dawson, A.R. & Parry, T., "Agenda for sustainable pavements", FHWA Technical Paper, 2010.
- 147 Dawson, A.R., "Making & keeping sustainable pavements", Keynote paper to New Zealand Institute of Highway Technology, May 2010.
- 148 Keikha, P., Hall, M.R. & Dawson, A.R. "Concrete pavements as a source of heating and

- cooling", *Proc. 11th International Symposium on Concrete Roads*, Seville, 2010.
- 149 Moghaddas Tafreshi, S.N. & Dawson, A.R. "A comparison of static and cyclic loading responses of foundations on geocell-reinforced sand", *Geotextiles & Geomembranes*, **32** (6), June, 2012, pp 55-68.
- 150 Hall, M.R., Keikhaei Dehdezi, P., Dawson, A.R., Grenfell, J. & Isola, R., "Influence of the thermo-physical properties of pavement materials on the evolution of temperature depth profiles in different climatic regions", *Amer. Soc. Civil Eng'rs., J. Materials in Civil Eng.*, **24** (1), 2012, pp 32-47.
- 151 Keikhaei Dehdezi, P., Hall, M.R. & Dawson, A.R. "Thermo-Physical Optimisation of Specialised Concrete Pavement Materials for Surface Heat Energy Collection and Shallow Heat Storage Applications", *J. Transportation Research*, **2240**, 2011, pp. 96-106.
- 152 Tavakoli Mehrjardi, Gh., Moghaddas Tafreshi, S.N. & Dawson, A.R., "The Response of Pavement Resting on Rubber-soil mixture under cyclic loading", *14th Eur. Conf. Earthquake Eng.*, Ohrid, 2010
- 153 Carrera, A., Dawson, A.R., Grenfell, J., Windsor, P. & Proctor, J., "Reusing trench excavation materials as on-site backfill", *Proceedings Institution of Civil Engineers, J. Waste & Recycling*, **165** (WR2), May, 2012 , pp 93-106.
- 154 Dawson, A.R., "Unsealed Highway Construction", Chapter 40 in *ICE Manual of Highway design & Management*, ed. Walsh, I.D., ICE publishing, 2011, pp 395-406.
- 155 Moghaddas Tafreshi, S.N., & Dawson, A.R. "Laboratory tests of footings supported on geotextile-reinforced sand under repeated loading", *Proc. 15th Eur. Conf. Soil Mech. & Geotechnical Eng'g.*, *Geotechnics of Hard Soils – Weak Rocks*, Athens, Greece; ed. Anagnostopoulos, A., Pachakis, M. & Tsatsanifos, C, Millpress, Vol. 2, 2011, pp. 1019-1024
- 156 Tavakoli Mehrjardi, Gh., Moghaddas Tafreshi, S.N., & Dawson, A.R., "Influence of Geocell reinforcement on damping properties of trench with pipe", *Proc. 15th Eur. Conf. Soil Mech. & Geotechnical Eng'g.*, *Geotechnics of Hard Soils – Weak Rocks*, Athens, Greece; ed. Anagnostopoulos, A., Pachakis, M. & Tsatsanifos, C, Millpress, **2**, 2011, pp. 1073-1078.
- 157 Tavakoli Mehrjardi, Gh., Moghaddas Tafreshi, S.N. & Dawson, A.R., "Buried pipes in rubber-soil backfilled trenches under cyclic loading", *ASCE Journal Geotechnical & Geoenvironmental Engineering.*, **138** (11), 2012, pp. 1346-1356. doi: [http://dx.doi.org/10.1061/\(ASCE\)GT.1943-5606.0000710](http://dx.doi.org/10.1061/(ASCE)GT.1943-5606.0000710).
- 158 Moghaddas Tafreshi, S.N. & Dawson, A.R., "Laboratory Model Tests for a Strip Footing Supported on Geocell Reinforced Sand Bed", in *Ground Improvement and Geosynthetics* ed. Puppala, A.J., Huang, J., Han, J. & Hoyos, L.R/, (*Geotech. Special Publ'n.* 207), Proc. 2010 GeoShanghai International Conference, American Soc. Civil Eng'rs., 2010, pp. 46-54. DOI:10.1061/41108(381)46
- 159 Moghaddas Tafreshi, S.N. & Dawson, A.R., "Reply to the discussions by Huang, C.C. on 'Comparison of bearing capacity of a strip footing on sand with geocell and with planar forms of geotextile reinforcement' [Geotextiles and Geomembranes 28(1), 2010, pp. 72–84], *Geotextiles and Geomembranes*, **29** (2), April, 2011, pp. 165-167.
- 160 Tavakoli Mehrjardi, Gh., Moghaddas Tafreshi, S.N. & Dawson, A.R., 2011, "Geosynthetic reinforcement for the protection of buried pipes beneath pavements", *6th Int'l Conf. Seismology & Earthquake Eng'g.*, 2011, 7pp
- 161 Dawson, A.R., 2012, "Recycled and Alternative Materials", Chapter 7 in *Modern Earth Buildings*, ed., Hall, M.R., Lindsay, R. & Krayenhoff, M., Woodhead Publishing, 2012.

- 162 Blankson, M., Erdem, S., Dawson, A.R. & Thom, N.H., "Comparative Study on the Rheological and Durability Characteristics of Conventional and Glass-Enriched Self Compacting Concrete", *6th International Structural Engineering and Construction Conference (ISEC)*, Zurich, 2011, June.
- 163 Erdem S., Dawson, A.R. & Thom, N.H., "Microstructure-linked strength properties and Impact Response of Conventional and Recycled Concrete Reinforced with Steel and Synthetic Macro Fibres", *Construction and Building Materials*, **25** (10), 2011, October, pp. 4025-4036.
- 164 Keikhaei Dehdezi, P., Hall, M.R. & Dawson, A.R., "Enhancement of Soil Thermo-physical Properties using Microencapsulated Phase Change Materials for Ground Source Heat Pump Applications", *Applied Mechanics and Materials*, **110-116**, 2012, pp. 1191-1198.
- 165 Erdem S., Dawson, A.R. & Thom, N.H., "Impact load-induced microstructural damage and microstructure associated mechanical response of concrete made with different surface roughness and porosity aggregates", *Cement and Concrete Research*, **42** (2), 2011, pp. 291-305.
- 166 Erdem S., Dawson, A.R. & Thom, N.H., "Influence of the Micro- and Nanoscale Local Mechanical Properties of the Interfacial Transition Zone on Impact Behaviour of Concrete made with different aggregates", *Cement and Concrete Research*, **42** (2), 2012, pp. 447-458.
- 167 Parry, T., Dawson, A.R., Byrne, M. & Isola, R., "Collecting transport information using smartphones", *Transportation Professional*, Dec, 2011, pp. 28-9.
- 168 Erdem S., Dawson, A.R. & Thom, N.H., "Micromechanical Structure-Property Relationships for the Damage Analysis of Impact Loaded Sustainable Concrete", Am. Soc. Civil Eng'rs, *J. Materials in Civil Eng.*, **25**(5), 2013, pp. 597-609
- 169 Tavakoli Mehrjardi, Gh., Moghaddas Tafreshi, S.N., & Dawson, A.R., "Combined use of geocell reinforcement and rubber-soil mixtures to improve performance of buried pipes", *Geotextiles & Geomembranes*, Vol. **34** (1), 2012, pp. 116-130 .
- 170 Keikhaei Dehdezi, P., Dawson, A.R., Hall, M., Miao, F. & Casey, S., Asphalt Pavements as a Source of Heating, *2nd Int'l. Symp. Asphalt Pavements & Environment*, Oct 1st- 3rd - Fortaleza, Brazil, 2012.
- 171 Dawson, A.R., Keikhaei Dehdezi, P., Hall, M.R., Wang, J.. & Isola, R., "Enhancing Thermo-Physical Properties of Asphalt Materials for Thermal Applications", *Road Mat'l's & Pavement Design*, Vol. **13**(4), 2012, pp. 784-803.
- 172 Keikhaei Dehdezi, P., Hall, M.R., Dawson, A.R. & Casey, S., "Thermal, mechanical, and microstructural analysis of concrete containing microencapsulated phase change materials", *Int'l. J. Pavement Engineering*, Vol. **14**(5), 2013, pp. 449-462.
- 173 Abdul Karim, R., Dawson, A.R. & Carrera, A, "Improvement of Foam Mix utilising Marginal Aggregates with Additives", *2nd Int'l. Symp. Asphalt Pavements & Environment*, Oct 1st- 3rd - Fortaleza, Brazil, 2012.
- 174 Keikhaei Dehdezi, P., Dawson, A.R. & Hall, M.R., "Pavements as a source of heating and cooling", *Transport Research Arena*, 2012, 23rd-26th April, Athens, Greece.
- 175 Byrne, M., Parry, Y., Isola, R. & Dawson, A.R., "Unsupervised identification of road defects from smartphone monitoring", *ASCE Journal of Infrastructure Systems*, accepted subject to corrections
- 175 Moghaddas Tafreshi, S.N., Khalaj, O. & Dawson, A.R., "Pilot-scale load tests of a combined multi-layered geocell and rubber-reinforced foundation", *Geosynthetics International*, **20**(3), June, 2013, pp. 143-161.
- 176 Tavakoli Mehrjardi, Gh., Moghaddas Tafreshi, S. N. & Dawson, A. R., "Pipe response in a

- geocell-reinforced trench and compaction considerations", *Geosynthetics International*, **20**(2), April, 2013, pp105–118.
- 177 Qiao, Y., Flintsch, G., Dawson, A.R. & Parry, T., "Examining the effects of climatic factors on flexible pavement performance and service life", *Jnl. Transportation Research Board*, **2349**, 2013, pp. 101-7.
- 178 Byrne, M., Parry, T., Isola, R. & Dawson, A.R., "Identifying road defect information from smartphones", *Road & Transport Research*, ARRB, **21**(1), 2013, March.
- 179 Qiao, Y., Dawson, A.R., Parry, T. & Flintsch, G., 2013, "Quantifying the effect of climate change on the deterioration of a flexible pavement" *Proc. Bearing Capacity Roads & Railways Conf.*, **2**, June, pp. 555-564.
- 180 Mohammed, M., Dawson, A.R. & Thom, N.H., "Production, microstructure and hydration of sustainable self-compacting concrete with different types of filler", *Construction and Building Materials*, **49**, November, 2013, pp. 84-92.
- 181 Mohammed, M., Dawson, A.R. & Thom, N.H., "Carbonation of filler typed self-compacting concrete and its impact on the microstructure by utilization of 100% CO₂ accelerating techniques", *Construction and Building Materials*, **50**, January, 2014, pp. 508–516.
- 182 Brito, L.A.T. & Dawson, A.R., "Métodos de Dimensionamento para Pavimentos de Rodovias de Baixo Volume de Tráfego", *Proc. 13th Congresso de Pesquisa e Ensino em Transportes - Panorama Nacional da Pesquisa em Transportes*, 2007, Rio da Janeiro, Brasil.
- 183 Bizjak, K.F., Dawson, A.R., Hoff, I., Makkonen, L., Ylhäisi, J.S. & Carrera, A., "The Impact of Climate Change on the European Road Network", *Proc. Inst. Civil Eng'rs, Transport*, **167**(5), March, 2014, pp. 281 -95. DOI: 10.1680/tran.11.00072
- 184 Moghaddas Tafreshi, S.N., Khalaj, O. & Dawson, A.R., "Repeated loading of soil containing granulated rubber and multiple geocell layers ", *Geotextiles & Geomembranes*, **42**(1), February, 2014, pp. 25-38.
- 185 Moghaddas Tafreshi, S.N., Javadi, S. & Dawson, A.R., "Influence of geocell reinforcement on uplift response of belled piles", *Acta Geotechnica*, **9**(3), June, 2014, pp 513-528.
- 186 Abdul Karim, R. & Dawson, A.R., "Laboratory Experimentation of Bituminous Foam Mix under Humid Curing Condition", *Proc. Int'l Road Federation Conf.*, 2014.
- 187 Jalali, V., Grenfell, J. & Dawson, A., "Temperature Effects on Warm Mix Asphalt Performance", *12th Conf. on Asphalt Pavements*, ed. Kim, Y.R., Int. Soc. Asphalt Pavements, CRC Press, 2014, pp. 1221-1232.
- 188 Hilal, A.A., Thom, N.H., & Dawson, A.R., "The Use of Additives to Enhance Properties of Pre-Formed Foamed Concrete", *Int'l J. Eng. & Tech.*, **7**(4), August, 2015, pp 286-293.
- 189 Qiao, Y., Dawson, A.R., Huvstig, A. & Korkiala-Tanttu, L., "Calculating Rutting of some Thin Flexible Pavements from Repeated Load Triaxial Test Data", *Int'l. J. Pavement Engineering*, **16** (5-6), 2015, pp 467-476. DOI: 10.1080/10298436.2014.943127.
- 190 Mohammed, M., Dawson, A.R. & Thom, N.H., "Improvement of the service life of sustainable self-compacting concrete SCC by integrating high dosage of cement replacement", *Int'l J. Structural Analysis & Design*, **2**(1), 2014, pp 41-48. DOI:10.15224/978-1-63248-054-5-48
- 191 Hilal, A., Thom, N. & Dawson, A., "On Entrained Pore Size Distribution of Foamed Concrete", *Construction & Building Materials*, **75**, January, 2015, pp. 227–233.
doi:10.1016/j.conbuildmat.2014.09.117
- 192 Makkonen, L., Ylhäisi, J.S., Tornqvist, J., Dawson, A. & Räisänen, J., "Climate change projections for variables affecting road networks in Europe", *Transportation Planning &*

- Technology*, **37** (8), 2014, pp. 678-94. . DOI: 10.1080/03081060.2014.959352.
- 193 Tavakoli Mehrjardi G., Moghaddas Tafreshi S.N., Dawson A., "Use of geocell reinforcement to improve performance of buried pipes", *10th Int'l. Conf. Geosynthetics*, 2014, Berlin, September
- 194 Moghaddas Tafreshi S.N., Khalaj O., Dawson A., Mašek B., "Static plate load tests on multi-layered geocell-reinforced bed", *10th Int'l. Conf. Geosynthetics*, 2014, Berlin, September
- 195 Mohammed, M.K., Dawson, A.R. & Thom, N.H., "Macro/Micro-pore structure characteristics and the chloride penetration of self-compacting concrete incorporating different types of filler and mineral admixtures", *Construction & Building Materials*, **72**, 2014, pp. 83-93.
- 196 Hilal, A.A., Thom, N.H. & Dawson, A.R., "Pore Structure and Permeation Characteristics of Foamed Concrete", *J. Advanced Concrete Technology*, **12**, 2014, pp.535-544.
- 197 Chiarelli, A., Dawson, A.R. & García, A.H., "Generation of virtual asphalt mixture porosity for computational modelling", *Powder Technology*, **275**, May 2015, pp. 351–360.
- 198 Chiarelli, A., Dawson, A.R. & García, A.H., "Analysis of the performance of an air-powered energy harvesting pavement", *Transportation Research Record*, **2523**, 2015, pp.156-163.
- 199 Hilal, A.M., Thom, N.H. & Dawson, A.R., "On void structure and strength of foamed concrete made without/with additives", *Construction & Building Materials*, **85**, June 2015, pp.157–164
- 200 Dawson, A., "Anticipating and Responding to Pavement Performance as Climate Changes", Chapter 4 in Gopalakrishnan, K., Steyn, W.J & Harvey, J. (eds.), "Climate Change, Energy, Sustainability and Pavements, Green Energy and Technology", 2014, Springer-Verlag, Berlin. DOI 10.1007/978-3-662-44719-2_4
- 201 Dawson, A., Mallick, R., García Hernández, A. & Keikhaei Dehdezi, P., "Energy Harvesting from Pavements", Chapter 18 in Gopalakrishnan, K., Steyn, W.J & Harvey, J. (eds.), "Climate Change, Energy, Sustainability and Pavements, Green Energy and Technology", 2014, Springer-Verlag, Berlin. DOI 10.1007/978-3-662-44719-2_18
- 202 Moghaddas Tafresh, S.N., Shaghaghi, T., Dawson, A.R. & Tavakoli Mehrjardi, Gh., "A simplified analytical method for predicting load the settlement of circular footings on multi-layered geocell-reinforced non-cohesive soil", *Geotextiles and Geomembranes*, **43** (4), August 2015, pp. 332–344 . DOI: 10.1016/j.geotexmem.2015.04.006
- 203 Dawson, A.R., "Materials used in road pavements", Chapter 6 in Hughes, D.A.B. & O'Flaherty, C, "Highways" (5th Edn.), 2015, Thomas Telford, London, pp165-218. DOI 10.1680/h5e.59931.165
- 204 Buttress, A.J., Jones, D.A., Dodds, C., Dimitrakis, G., Campbell, C.J., Dawson, A. & Kingman, S.W., "Understanding the scabbling of concrete using microwave energy", *Cement & Concrete Research*, **75**, 2015, pp. 75–90. DOI 10.1016/j.cemconres.2015.04.009
- 205 Chiarelli, A., Dawson, A.R. & García, A., "Generation of 3D soil/asphalt porosity patterns for numerical modelling", in "From Fundamentals to Applications in Geotechnics", 2015, Millpress, Amsterdam, pp. 1089 – 1096. DOI 10.3233/978-1-61499-603-3-1089
- 206 Chiarelli, A., Dawson, A.R. & García, A.H., "Parametric analysis of energy harvesting pavements operated by air convection", *Applied Energy*, **154**, 2015, pp. 951–958.
- 207 Farhan, A.H., Dawson, A.R. & Thom, N.H., "Rubber modification of cement-stabilized aggregate: delivering more sustainable pavement mixes", *9th Int'l Conf. Pavement Technology*, Dalian, China, August 2015.
- 208 Hassn. A., Chiarelli, A., Dawson, A. & García, A., "Water evaporation dynamics in moist asphalt samples with various air void contents", *9th Int'l Conf. Pavement Technology*, Dalian, China, August 2015.
- 209 Sarkar, R. & Dawson, A.R., "Economic Assessment of use of Pond Ash in Pavements", *Int'l.J.*

- Pavement Engineering*, **18** (7), 2017, 578-594. See DOI = 10.1080/10298436.2015.1095915.
- 210 Hassn, A. Chiarelli, A. Dawson, A. García, Thermal properties of asphalt pavements under dry and wet conditions, *Materials and Design*, 2016, **91**, pp 432–439.
- 211 Chiarelli, A., García, A.H. & Dawson, A.R., "Stochastic generation of virtual air pores in granular materials", *Granular Matter*, **17**, 2015, pp.617–627. DOI 10.1007/s10035-015-0585-x
- 212 Farhan, A.H., Dawson, A.R., Thom, N.H., Adam, S. & Smith, M.J., "Flexural characteristics of rubberized cement-stabilized crushed aggregate for pavement structure", *Materials & Design*, **88**, 2015, pp. 897–905.
- 213 Qiao, Y., Dawson, A.R., Parry, T. & Flintsch, G., 2015, "Evaluating the effects of climate change on maintenance intervention strategies and Life-Cycle Costs", *Transportation Research*, **41**, December, pp. 492–503. doi:10.1016/j.trd.2015.09.019
- 214 Farhan, A.H., Dawson, A.R. & Thom, N.H., 2016, "Characterization of rubberized cement bound aggregate mixtures using indirect tensile testing and fractal analysis", *Construction & Building Materials*, **105** (1), pp 94-102.
- 215 Tavakoli Mehrjardi, Gh., Moghaddas Tafreshi, S. N. & Dawson, A. R., 2015, " Numerical analysis on buried pipes protected by combination of geocell reinforcement and rubber-soil mixture", *Int'l J. Civil Engineering, Transaction B: Geotechnical Engineering*, **13** (2), June, pp 91-104.
- 216 Khalaj, O., Moghaddas Tafreshi, S.N., Dawson, A.R. & Mašek, B., 2015, "Improvement of pavement foundation response with multi-layers of geocell reinforcement: Cyclic plate load test", *Geomechanics and Engineering*, **9** (3), pp. 373-395.
- 217 García A., Hassn, A., Chiarelli, A. & Dawson, A.R., 2015, Multivariable analysis of potential evaporation from moist asphalt mixture, *Construction and Building Materials*, **98**, pp. 80–88.
- 218 Farhan, A.H., Dawson, A.R. & Thom, N.H., 2016, "Effect of cementation level on performance of rubberized cement stabilized aggregates", *Materials & Design*, **97**, pp 98-107.
- 219 Hassn. A., Aboufoul, M., Wu, Y., Dawson, A. & García, A., 2015, "Effect of air voids content on the heat transfer properties of asphalt mixture", *Construction & Building Materials*, **115**, pp. 327-335.
- 220 Kamla, J., Parry, T. & Dawson, A., 2018, "Roundabout Accident Prediction Model: Application of Random Parameter Negative Binomial Approach to Roundabout Accidents", *Transportation Research Record*, J. of the Transportation Research Board, **2585**, pp. 11-19. DOI = 10.3141/2585-02.
- 221 Qiao, Y., Dawson, A.R. & Parry, A. "Immediate Effects of Some Corrective Maintenance Interventions on Flexible Pavements", *I. J. Pavement Engineering*, **19**(6), pp.502-508. DOI = 10.1080/10298436.2016.1176164
- 222 Tafreshi, S.N.M., Khalaj, O., Dawson, A.R. & Masek, B., 2015, "Repeated load response of soil reinforced by two layers of geocell", in: Drulsa, M., Marschalko, M., Yilmaz, I., Segallini, A., Ferrero, A.M. & Bednarik, M., eds., *Procedia Earth & Planetary Science*, **15**, Elsevier Science BV. pp. 99-104.
- 223 Moghaddas Tafreshi, N., Sharifi, P., Dawson, A.R., 2016, "Performance of circular footings on sand by use of multiple-geocell or -planar geotextile reinforcing layers", *Soils & Foundations*, **56** (6), pp. 984-997.
- 224 Chiarelli, A., Al-Mohammedawi, Dawson, A., García Hernández, A., 2017. "Construction and configuration of convection-powered asphalt solar collectors for the reduction of urban temperatures", *International Journal of Thermal Sciences*, **112**, pp.242-251
- 225 Moghaddas Tafreshi, S.N., Joz Darabi, N. & Dawson, A., 2016. "Experimental and numerical

- investigation of footing behaviour on multi-layered rubber-reinforced soil", *Eur. J. Environmental & Civil Engineering*, 24pp. DOI=10.1080/19648189.2016.1262288
- 226 Chiarelli, A., Dawson, A., García Hernández, A., 2017. "Pavement temperature mitigation by the means of geothermally and solar heated air", *Geothermics*, **68**, July, pp.9–19
- 227 Kamla, J., Dawson, A.R. & Parry, T., 2017. "The Influence of Road Marking, Shape of Central Island, Truck Apron on Total and Truck Accidents at Roundabouts", *Transport Infrastructure and Systems*, ed. Dell'Acqua, G, & Wegman, F., CRC Press/Balkema, pp.509-514.
- 228 Chiarelli, A., Dawson, A.R. & García, A.H., 2017. "Evaluation of the effects of air convection in energy-harvesting asphalt pavements", *Sustainable Energy Technologies and Assessments*, **21**, June, pp.50-58
- 229 Awoyer, P., Dawson, A.R. & Thom, N.H., 2017. "Suitability of Mortars Produced using Laterite and Ceramic Wastes: Mechanical and Microscale Analysis", *Construction & Building Materials*, **148**, pp.195–203
- 230 Schmall, P. & Dawson, A.R., 2017. "Ground Freezing Experience on the East Side Access Northern Boulevard Crossing, New York", *Ground Improvement*, Inst. Civil Eng'rs, **170**(3), pp. 159-172
- 231 Hilal, A.A., Dawson, A.R. & Thom, N.H., 2016. "Failure Mechanism of Foamed Concrete Made with/without Additives and Lightweight Aggregate", *J. Advanced Concrete Technology*, **14**(9), pp. 511-520. <http://doi.org/10.3151/jact.14.511>
- 232 Mohammed, H., Thom, N.H. & Dawson, A.R., 2017. "Assessing the Bond Strength of Two layer Roller Compacted Concrete (RCC) for Pavements", *World Conference on Pavement and Asset Management*, WCPAM2017, Milan, 10pp.
- 233 Yideti, T.F., Dawson, A.R. & Birgisson, B., 2017. "Implementation of shakedown and packing theories for unbound granular materials", *Proc. 10th Bearing Capacity Roads, Railways & Airfields*, ed. Loizos, A., Al-Qadi, A.L. & Scarpas, A., June 28-30, Athens, Greece, CRC Press, 10 pp.
- 234 Moghaddas Tafreshi, S.N., Joz Darabi, N. & Dawson, A.R., 2018. "Cyclic loading response of footing on multilayered rubber-soil mixture", *Geomechanics and Engineering*, **14** (2), February, pp.115-129. [IF 1.818]
- 235 Awoyer, P., Akimusuru, J.O., Ndambuki, J.M., Thom N.H. & Dawson, A.R., 2018, "Microstructural characteristics, porosity and strength development in ceramic-laterized concrete", *Cement & Concrete Composites*, **86**, February, pp.224-237. [IF 4.66]
- 236 Farhan, A., Dawson, A.R. & Thom, N.H., 2018, "Damage propagation rate and mechanical properties of fiber-reinforced and cement-bound granular materials used in pavement structure", *Construction & Building Materials*, **172**, May, pp.112–124. [IF 3.485]
- 237 Farhan, A.H., Dawson, A.R. & Thom, N.H., 2020, "Effect of rubber incorporation on the behaviour of pavement cemented mixtures under cyclic flexural loading: a preliminary study", *Journal of Testing and Evaluation*, ASTM, **48**(4), July, pp. [IF 0.669] <https://doi.org/10.1520/JTE20170746>.
- 238 Kamla, J., Parry, T. & Dawson, A.R., 2019, "Analysing Truck Harsh Braking Incidents to Study Roundabout Accident Risk", *Accident Analysis & Prevention*, **122**, January, pp.365-377. [IF 2.584, SNIP 1.9]
- 239 Chiarelli, A., Dawson, A.R. & García, A.H., 2018, "Mitigation of asphalt pavement temperatures by means of natural air convection", in *Functional Pavement Design: Proc 4th Chinese-European Workshop on Functional Pavement Design*, eds. Erkens, S., Liu, X., Anupam, K. & Tan, Y., CRC Press. pp 1269-1278

- 240 Farhan, A., Dawson, A.R. & Thom, N.H., 2018, "Recycled Hybrid Fiber-Reinforced & Cement-Stabilized Pavement Mixtures: Tensile properties and cracking characterization", *Construction & Building Materials*, **179**, August, pp. 488–499.
doi.org/10.1016/j.conbuildmat.2018.05.233 [IF 3.485]
- 241 Khan, M.W., Dawson, A.R. & Marshall, A.M., 2018, "A Dynamic Gradient Ratio Test Apparatus", *Geotextiles & Geomembranes*, **46** (6), December, pp.782-789.
doi.org/10.1016/j.geotexmem.2018.07.003 [IF 2.366]
- 242 Moghaddas Tafreshi, S.N., Rahimi, M., Leshchinsky B. & Dawson, A.R., 2018, "Experimental and Numerical Investigation of Uplift Capacity of Plate Anchors in Geocell-Reinforced Soil", *Geotextiles & Geomembranes*, **46**(6), December, pp.801-816. [IF 2.366]
- 243 Alenezi, T., Norambuena-Contreras, J., Dawson, A. & García, A., 2019, "A novel type of cold mix pavement material made with calcium-alginate and aggregates", *J. Cleaner Production*, **212** (March), pp.37-45. DOI: 10.1016/j.jclepro.2018.11.297 [IF 5.651]
- 244 Moghaddas Tafreshi, S.N., Rahimi, M., Dawson, A.R. & Leshchinsky B., 2019, "Cyclic and Post-cycling Anchor Response in Geocell-Reinforced Sand", *Canadian Geotech. J.*, **56**(11): 1700-1718.
doi.org/10.1139/cj-2018-0559 [IF 2.565]
- 245 Ghotbi Siabil, S.M.A., Moghaddas Tafreshi, S.N., Dawson, A.R. & Parvizi Omran, M., 2019, "Behavior of expanded polystyrene (EPS) blocks under cyclic pavement foundation loading", *Geosynthetics International*, **26**(1), February, pp. 1-25. doi.org/10.1680/jgein.18.00033 [IF 2.406]
- 246 Qiao, Y., Dawson, A.R., Parry, T. & Flintsch, G., 2019, "Life cycle cost of flexible pavements and climate variability: case studies from Virginia", *Structure and Infrastructure Engineering*, **15**(12), pp: 1665-1679. doi.org/10.1080/15732479.2019.1642364 [IF 1.845]
- 247 Chiarelli A, Dawson AR, García A, 2016, "Computational packing of aggregates for the study of virtual asphalt samples", ISAP 2016 Symposium, *From Molecules to Innovative pavements*, Jackson Hole, Wyoming, USA.
- 248 Rahman, T., Dawson, A.R. & Thom, N.H., 2019, "Strategies for reduced cooling time of asphalt for airfield pavement overlay", 2019 *International Airfield and Highway Pavements Conference*, ASCE, Chicago, pp 251-265. doi.org/10.1061/9780784482476.026
- 249 Farhan, A.H., Dawson, A.R. & Thom, N.H., 2019, "Behaviour of rubberized cement-stabilized aggregate mixtures containing different stabilisation levels under static and dynamic flexural loading", *Road Materials and Pavement Design*, **21**(8), pp. 2282-2301
doi.org/10.1080/14680629.2019.1605924
- 250 Moghaddas Tafreshi, S.N., Darabi, N.J., Dawson, A.R. & Azizian, M., 2020, "Experimental evaluation of geocell and EPS geofoam as means of protecting pipes at the bottom of repeatedly loaded trenches", *International Journal of Geomechanics*, ASCE, **20**(4), April.
doi.org/10.1061/(ASCE)GM.1943-5622.0001624
- 251 Ghotbi Siabil, S.M.A., Moghaddas Tafreshi, S.N. & Dawson, A.R., 2020, "Response of road pavements incorporating both geocells and expanded polystyrene (EPS) geofoam", *Geotextiles & Geomembranes*. **48**(1) February, pp. 1-23.
doi.org/10.1016/j.geotexmem.2019.103499
- 252 Thom, N.H. & Dawson, A.R., 2019, "Sustainable Road Design: Promoting recycling and non-conventional materials", *Sustainability* (special issue on "Sustainable High Volume Road and Rail Transport in Low Income Countries"), *Sustainability*, **11**(21), 6106.
doi.org/10.3390/su11216106
- 253 Qiao, Y., Dawson, A., Parry, T., Flintsch, G., Jacobs, J. & Daniel, J.S., 2020, "Flexible Pavements and Climate Change: A Comprehensive Review and Implications", *Sustainability* (special issue on "Sustainability in Pavement Design and Pavement Management"), **12**(3), 1057.

- doi.org/10.3390/su12031057
- 254 Rahman, T., Dawson, A. & Thom, N., 2020, "Warm Mix Asphalt (WMA) for Rapid Construction in Airfield Pavement", *Construction & Building Materials*, **246**, June. doi.org/10.1016/j.conbuildmat.2020.118411
- 255 Siino, G., Govan, C., Lo Presti, D. & Dawson, A.R., 2019, "Embankment Failure Mechanisms and MCDM Methods for Railway Geotechnical Asset Management", *Proc. Railway Engineering Conf.*, Paper 16, Edinburgh.
- 256 Roberto, S.M., Hernández, A.G. & Dawson, A., 2019, "Comparative study of voids in minerals aggregates of virtual aggregate assembly using a game physics' engine". *Abstract 247, Proc. InterPore 11th Annual Meeting*, May, Valencia, pp413-4
- 257 Farhan, A.H., Dawson, A.R. & Thom, N.H., 2020, "Compressive behaviour of rubberized cement-stabilized aggregate mixtures", *Construction & Building Materials*, **262**. doi.org/10.1016/j.conbuildmat.2020.120038
- 258 Moghaddas Tafreshi, S.N., Amin Ghotbi Siabil, S.M. & Dawson, A.R., 2020, "Expanded polystyrene geofoam", pp117-153 (Chapter 4) in "New Materials in Civil Engineering", eds. Samui, P., Kim, D., Iyer, N. & Chaudhary, S., Butterworth-Heinemann, 1104pp. ISBN: 9780128189610.
- 259 Mohammed, H., Thom. N.H. & Dawson, A.R., 2019, "Load transfer stiffness of two-layer roller compacted concrete for pavements", *J. Materials & Applications*, **8**(2), pp65-72.
- 260 Sardehaei, E.A., Tavakoli Mehrjardi, Gh. & Dawson, 2020, A "From full-scale investigations to analytical predictions into installation damage of nonwoven geotextiles", *Geomechanics and Engineering*, Techno Press, **17**(1), pp81-96.
- 261 A. García, S. Michot-Roberto, S. Dopazo-Hilario, A. Chiarelli, & A. Dawson, 2020, "Creation of realistic virtual aggregate avatars", *Powder Technology*, **378**(B), pp760-71. doi.org/10.1016/j.powtec.2020.10.036
- 262 Moghaddas Tafreshi, S.N., Parvizi Omran, M., Rahimi, M. & Dawson, A.R., 2021, "Experimental Investigation of the Behavior of Soil Reinforced with Waste Plastic Bottles under Cyclic Loads", *Transportation Geotechnics*, **26**(1). doi.org/10.1016/j.trgeo.2020.100455
- 263 Zakeri, R., Moghaddas Tafreshi, S.N., Dawson, A.R., & Baidya, D.K., 2021, "Influence of Rubber Sheet on Dynamic Response of Machine Foundations", *Construction & Building Materials*, **274**, paper 121788. doi.org/10.1016/j.conbuildmat.2020.121788
- 264 Rahman, T., Dawson, A.R., Thom, N.H., Ahmed, I. & Carvajal-Munoz, J.S., 2020, "Determining the Allowable Opening-to-Traffic Asphalt Temperature for Airport Pavements", *Int'l. J. Pavement Eng.*, doi.org/10.1080/10298436.2020.1855350
- 265 Ahmed, I., Thom, N.H., Zaidi, S.B.A., Carvajal-Munoz, J.S. & Dawson, A.R., 2020 "Application of a Novel Linear-Viscous Approach to Predict Permanent Deformation in Simulative Inverted Pavements", *Construction & Building Materials*, **267**, doi.org/10.1016/j.conbuildmat.2020.120681
- 266 García-Hernández, A., Wan, L., Dopazo-Hilario, S., Chiarelli, A. & Dawson, A.R., 2021, "Generation of virtual asphalt concrete in a physics engine", *Construction and Building Materials*, **286**, Paper 122972.
- 267 S. Michot-Roberto, A. García, S. Dopazo-Hilario, A. Chiarelli, & A. Dawson, 2021, "The Spherical Primitive and Perlin Noise Method to Recreate Realistic Aggregate Shapes", *Granular Matter*, **23**, Article 41, 11pp. doi.org/10.1007/s10035-021-01105-6
- 268 Moghaddas Tafreshi, S.N., Joz Darabi, N., Dawson, A.R., Azizian, M., 2020, "Combining EPS geofoam with geocell to reduce buried pipe loads and trench surface rutting", *Geotextiles and Geomembranes*, Elsevier, **48**(3), 400-418.

- 269 Moghaddas Tafreshi, S.N., Joz Darabi, N., Tavakoli Mehrjardi, GH., Dawson, A.R., 2019, "Experimental and numerical investigation of footing behaviour on multi-layered rubber-reinforced soil", *European Journal of Environmental and Civil Engineering*, **23**(1) pp. 29-52.
- 270 Campos Guereta, I., Dawson, A.R. & Thom, N.H., 2021, "An alternative continuous form of Arya and Paris model to predict the soil water retention curve of a soil", *Advances in Water Resources*, **154**, August, Paper 103968. doi.org/10.1016/j.advwatres.2021.103968
- 271 Moghaddas Tafreshi, S.N., Rafiezadeh Malekshah, A., Rahimi, M. & Dawson, A.R., 2022, "Bearing capacity improvement using soil-filled post-consumer PET bottles", *Geosynthetics International*, **29**(3), June, pp. 205-216. doi.org/10.1680/jgein.21.00031
- 272 Chu, X., Dawson, A.R. & Thom, N., 2021, "Prediction of resilient modulus with consistency index for fine-grained soils", *Transportation Geotechnics*, **31**, November, paper 100650. doi.org/10.1016/j.trgeo.2021.100650
- 273 Moghaddas Tafreshi, S.N., Zakeri, R., Dawson, A.R. & Hegde, A., 2022, "Compressive Wave Isolation of Lightweight Equipment Very Close to a Vibration Source Using a Rubber Sheet", *International Journal of Geomechanics*, **22**(1). doi.org/10.1061/(ASCE)GM.1943-5622.0002252
- 274 Campos Guereta, I., Dawson, A.R. & Thom, N.H., 2021, "A tool for estimating the water content of unsaturated railway track formation layers", in: Tutumluer E., Nazarian S., Al-Qadi I., Qamhia I.I. (eds), *Advances in Transportation Geotechnics IV. Lecture Notes in Civil Engineering*, **166**, pp 363-376, Springer. doi.org/10.1007/978-3-030-77238-3_27.
- 275 Jalali, V., Apeagyei, A., Grenfell, J.R.A. & Dawson, A.R., 2022, "Effect of Warm Mix Asphalt Additives on Physio-chemical and Viscoelastic Properties of Bitumen", SSRN. (abstract at doi.org/10.2139/ssrn.3975291)
- 276 Khan, M.W., Dawson, A.R. & Marshall, A.M., 2021, "Filtration Performance of Non-Woven Geotextiles with Internally-stable and -unstable Soils under Dynamic Loading", *Geotextiles & Geomembranes*, **50**(2), April, pp.293-311. doi.org/10.1016/j.geotexmem.2021.11.007
- 277 Ullah, S., Tanyu, B & Dawson, A.R., 2022, "Reclaimed asphalt pavement (RAP) as an unbound base course material: A mechanistic design approach based on multi-stage repeated load triaxial tests", *Transportation Geotechnics*, **33**, March. doi.org/10.1016/j.trgeo.2022.100729
- 278 Moghaddas Tafreshi, S.N., Karami, N., Rahimi, M., Dawson, A.R., 2023, "Response of a model footing reinforced by novel three dimensional elements", *Int'l J. Physical Modelling in Geotech.*, **23**(2), pp. 92-111. doi.org/10.1680/jphmg.21.00055
- 279 Campos Guereta, I., Dawson, A.R. & Thom, N.H., 2022, "New expressions for waterflow in coarse road and rail track materials", *Proc. 11th Conf. Bearing Capacity of Roads, Railways & Airfields*.
- 280 Michot-Roberto, S., García-Hernández, A., Dopazo-Hilario, S. & Dawson, A.R., 2021, "Use of a physics toolbox to simulate aggregate packings", *Construction & Building Materials*, **311**, Paper 125254. doi.org/10.1016/j.conbuildmat.2021.125254
- 281 Rahman, T., Dawson, A.R., Thom, N.H., Sudibyo, T., Carvajal-Munoz, J.S., Suwarto, F. & Ahmed, I., 2022, "Spray water cooling of newly laid asphalt pavement for rapid opening to traffic", *Road Materials and Pavement Design*, **24**(4), pp. 1103-1129 . doi.org/10.1080/14680629.2022.2060127
- 282 Moghaddas Tafreshi, S.N., Kheiri, S., Azizian, M. & Dawson, A.R., 2024, "Geocell-reinforced bed under static and cyclic loads: soil density and grain size effects", *Geosynthetics Int'l.*, **31**(2), pp. 126-139. doi.org/10.1680/jgein.22.00259
- 283 Chu, X., Campos-Guereta, I., Dawson, A.R. & Thom, N.H., 2023, "Sustainable pavement drainage systems: subgrade moisture, subsurface drainage methods and drainage effectiveness", *Construction & Building Materials*, **364**, paper 129950. doi.org/10.1016/j.conbuildmat.2022.129950

- 284 Amiri, A., Moghaddas Tafreshi, S.N., Dawson, A.R. & Mohasseb, S., 2023, "Machine Foundation Response Subjected to Vertical Vibration: Experimental and Analytical Using Cone Model", *European J. Env. & Civil Eng'g.*, **27**(13), pp. 3920–3950. doi.org/10.1080/19648189.2023.2165164
- 285 Chu, X., Dawson, A.R., Zhang, J., Thom, N.H., Guo, C. & Qin, L., 2023, "Sensitivity analysis of pavement response to subgrade moisture variations", *J. Building Eng'g.*, **69**, June, paper 106285. doi.org/10.1016/j.jobc.2023.106285
- 286 Amiri, A., Moghaddas Tafreshi, S.N. & Dawson, A.R., 2023, "Vibration Response of Machine Foundations Protected by Use of Adjacent Multi-layer Geocells", *Geotextiles & Geomembranes*, **51**(4), August, pp15-35. doi.org/10.1016/j.geotexmem.2023.03.001
- 287 Chu, X., Thom, N.H., Dawson, A.R., Qin, L. & Chen, H., 2023, "Drainage effects on shear behaviour and stiffness of subgrade soils and pavement drainage implications", *Construction & Building Materials*, **389**, July, paper 131697. doi.org/10.1016/j.conbuildmat.2023.131697
- 288 Qiao, Y., Zhang, S., Guo, Y., Wang, Y., Santos, J., Stoner, A., Dawson, A. & Ma, T., 2023, "Assessing the effects of unit cost uncertainty on flexible road pavement economics under the influence of climate change", *J. Cleaner Production*, **414**, paper 137597. doi.org/10.1016/j.jclepro.2023.137597
- 289 Qiao, Y., Zhang, S., Wang, Y., Dawson, A., Wake, C. & Ma, T., 2023, "Simulating floodwater movement in pavements for developing post-flooding time-depth-damage functions", *Construction & Building Materials*, **396**, Sept., paper 132408. doi.org/10.1016/j.conbuildmat.2023.132408
- 290 Moghaddas Tafreshi, S.N., Khanjani, A.A., Dawson, A.R. & Faramarzi, A., 2023, "Performance of recycled waste aggregate mixed with crushed glass over a weak subgrade", *Construction & Building Materials*, **402**, Oct., paper 133002. doi.org/10.1016/j.conbuildmat.2023.133002
- 291 Moghaddas Tafreshi, S.N., Sarabadani, A., Rahimi, M., Dawson, A.R., Faramarzi, A., 2023, "Geocell-reinforced bed anchored with additional vertical elements under repeated loading", *Transportation Geotechnics*, **42**, Sept., paper 101089. doi.org/10.1016/j.trgeo.2023.101089
- 292 Moghaddas Tafreshi, S.N., Amiri, A. & Dawson, A.R., 2023, "Sustainable Use of End-of-Life-Tires (ELTs) in a Vibration Isolation System", *Construction & Building Materials*, **405**, Nov., paper 133316. doi.org/10.1016/j.conbuildmat.2023.133316
- 293 Chu, X., Dawson, A.R., Thom, N.H., Chen, H. & Qin, L., 2024, "Permanent deformation characteristics of unsaturated subgrade soils under cyclic loading", *Case Studies in Construction Materials*, **20**, July, paper e03099. doi.org/10.1016/j.cscm.2024.e03099
- 294 Almawla, S.S., Mohammed, M.K., Al-Hadithi, A.K. & Dawson, A.R., 2024 "Evaluation and optimization of volume fraction and aspect ratio of Polyethylene Terephthalate (PET) fibers in self-compacting lightweight concrete", *J. Structural Integrity & Maintenance*, **9**(1). doi.org/10.1080/24705314.2024.2314823
- 295 Moghaddas Tafreshi, S.N., Zakeri, R. & Dawson, A.R., 2025, "Vibration response of closely spaced footings protected by use of rubber sheet: An in-situ investigation", *Geotextiles & Geomembranes*, **53**(1), February, pp. 1-20. doi.org/10.1016/j.geotexmem.2024.08.007
- 296 Mohammed, H., Hacham, Z., Thom, N.H. & Dawson, A.R., 2024, "Design of Two-Layer Roller Compacted Concrete with Joints by KENSLAB", *Transportation Research Record*. doi.org/10.1177/03611981241277821
- 297 Khan, M.W., Dawson, A.R., Marshall, A.M. & Chaudhry, R., 2024, "Measuring pore sizes of nonwoven geotextiles by X-ray CT images: a comparative evaluation", *Geosynthetics Int'l*, paper 24.00055 ahead of print, pp. 1-37. doi.org/10.1680/jgein.24.00055
- 298 Moghaddas Tafreshi, S.N., Noroozzadeh , A., Zakeri, R. & Dawson, A.R., 2025, "Dynamic Response of Machine Foundations on Rubber-Sand Bags", *Geosynthetics Int'l*, paper 24.00108

- ahead of print. doi.org/10.1680/jgein.24.00108
- 300 Moghaddas Tafreshi, S.N., Ahmadian, A.F. & Dawson, A.R., 2025, "Use of soilbags to protect flexible pipes against repeated load effects", *Geotextiles & Geomembranes*, 53(4), August, pp. 823-846
- 301 Cravo, M.C.C., Trescastro,F., Buccioni, P., Doering, D., do Nascimento, L.A.H., Brito, L.A.T., Grimm, H.F., Matuella, M.F., Núñes, W.P. & Dawson, A.R., 2024, "Bobina indutora em circuito impresso para medição não-destrutiva de deformação permanente e deslocamentos horizontais em estruturas de pavimentos – 'Cell Coil 3D'" [Printed circuit inductor coil for non-destructive measurement of permanent deformation and horizontal displacements in pavement structures], Patent Application BR102024002955-0, 30th April, Rio de Janeiro.
- 302 Cheung, L.W. & Dawson, A.R., 1998, "The use of simple soil tests in assessing subgrade", Proc. 5th Int'l Conf. Bearing Capacity of Roads & Airfields, Lisbon, Portugal, III, pp 1447-58.
- 303 Kamal, M.A., Dawson, A.R. & Karaşahin, M., 1993, "Mechanical Behaviour of Unbound Granular Materials in Pavements", Symposium on Flexible Pavements (Euroflex), Lisbon, Portugal, 20th-22nd September, 6pp.
- 304 Karaşahin, M., Dawson, A.R. & Holden, J.T., 1993, "Using CRISP to model non-linear granular material subjected to pavement loading", 5th CRISP Users Workshop, Surrey Univ., September, 7 pp.