

SELECTED MMLS3 BIBLIOGRAPHY (UPDATED OCTOBER 11, 2006)

Introductory notes:

- If any publication cannot be obtained, MLS Test Systems will endeavour to assist with the acquisitions
 - Additional web sites can also be explored for MMLS3 and APT information:
 - <http://www.k-state.edu/pavements/trb/A2B09/index.htm>
 - For the above website see Annual Meeting
 - http://gulliver.trb.org/news/blurb_detail.asp?id=2992
1. Bhattacharjee, S., Mallick, R.B., Hugo, F., 2004, *Use of accelerated pavement trafficking and testing for pavement material characterization in the laboratory*. CD-Rom Proceedings Second International APT Conference, Minneapolis, USA.
 2. Bhattacharjee, S., Gould, J.S.; Mallick, RB, Hugo F, 2004, , *An evaluation of use accelerated loading equipment for determination of fatigue response of asphalt pavement in laboratory*, International Journal of Pavement Engineering, June
 3. Douries, W.J., Smit, A. de F., Jenkins, K.J., Wise, J.C. 2002, *Asphalt mix design and analysis towards improving compactibility of wearing course mixes in the Western Cape*, The 21st Annual South African Transport Conference, Pretoria, Session 4C, 15-18 July.
 4. Ebels L-J, Jenkins K, and Sadzik E, 2004, *Investigation into the Correlation of the MMLS3 and HVS Devices*, CD-Rom Proceedings Second International APT Conference, Minneapolis, USA. .
 5. Epps, A..L., 2001. Performance prediction with the MMLS3 at WesTrack. Report Number 2134-S. Texas Transportation Institute. The Texas A & M University March, pp4.
 6. Epps, A..L., Ahmed, T., Little, D.C. and Hugo, F. 2001. Performance prediction with the MMLS3 at WesTrack. Report Number 2134-1. Texas Transportation Institute. The Texas A & M University, May.
 7. Epps, A.L., Walubita, L.F. and Bangera, N. 2001. *Comparing Pavement Response and Rutting Performance for Full-Scale and One-Third Scale Accelerated Pavement Testing*. 80th Annual Meeting of the Transportation Research Board, Washington, D.C. 7-11 January.
 8. Epps, A.L., Hugo, F., Walubita, L.F. and Bangera, N. 2003. *Comparing Pavement Response and Rutting Performance for Full-Scale and One-Third Scale Accelerated Pavement Testing*, Journal of Transportation Engineering, Vol. 129, No. 4, pp. 451-461.
 9. Garriochi P, Dutlow C, and Ebels L-J, (2004), *The Use of Carbonaceous Shale in Bitumen-emulsion Asphalt Mixtures*, CD Rom Proceedings of the 8th Conference on Asphalt Pavements for Southern Africa (CAPSA'04) 12 – 16 September 2004 ISBN Number: 1-920-01718-6 Sun City, South Africa Produced by: Document Transformation Technologies cc
 10. Hugo F and Müller, F.P.J. 1991. Pr Eng (co-patent holder, the electrical engineer in the Department of Civil Engineering at the University of Stellenbosch), Mobile Load Simulator Patent. Final registration, South Africa, September.
 11. Hugo F and Reck, N.C. 1994. *An investigation Into the Rutting Performance of a Thick Asphalt Base by Means of Accelerated Testing on Model Scale*, Proceedings, 6th Conference on Asphalt Pavements for Southern Africa (CAPSA), Vol.2, Cape Town, South Africa, 9-13 October.

12. Hugo F. and Epps Martin A 2004. *Significant Findings from the Full-Scale Accelerated Pavement Testing*. Synthesis 325, Transportation Research Board, National Academies, Washington DC.
13. Hugo, F. 1999. *Conference synthesis and view ahead*. CD-ROM Proceedings of the International Conference on Accelerated Pavement Testing, Reno, Nevada, 18-20 October.
14. Hugo, F. and Reck, N.C. 1993. An investigation into the effects of artificial aging on rutting performance of a thick asphalt base using the model MLS, Research Report 1934-1, Interim Report Center for Transportation Research, The University of Texas at Austin, November.
15. Hugo, F. and Walubita, L. 2000. Results of one-third scale model mobile load simulator testing at selected sites on the N3 in the Harrismith district. Report presented to Africon, 14 pp
16. Hugo, F., Smit, A. de F. and Epps, A. 1999. *A Case study of model APT in the field*. CD-ROM Proceedings of the International Conference on Accelerated Pavement Testing, Reno, Nevada, 18-20 October.
17. Hugo, Fred, Smit Andre de Fortier, Poolman Pieter, Powell Buzz, Bacchi Chris, 2004 *Distress of hot mix asphalt on the NCAT test track due to accelerated wet trafficking with the MMLS3*, CD-ROM Proceedings Second International APT Conference, Minneapolis, USA.
18. Hugo, F., De Witt, R., Helmich, A., 2004, *Application of theMMLS3 as APT tool for evaluating asphalt performance in Namibia*, CD Rom Proceedings of the 8th Conference on Asphalt Pavements for Southern Africa (CAPSA'04) 12 – 16 September 2004 ISBN Number: 1-920-01718-6 Sun City, South Africa Produced by: Document Transformation Technologies cc
19. Jenkins, K.J. and Douries, W. 'Gyratory Compaction and MMLS3 Testing of Asphalt Wearing and Base Courses for Cape Town International Airport Taxiway Rehabilitation'. Institute for Transport Technology ITT Report 1-2001, University of Stellenbosch, South Africa (2001) 1-40.
20. Jenkins, K.J., Pretorius, F.J., Hugo, F., Carr, R., 2003, *Asphalt Mix Design for Cape Town International Airport using Scaled APT and other Selected Tests*, Paper presented at the 6th International RILEM Symposium on Performance Testing and Evaluation of Bituminous Materials, PTEBM'03 April 14-16, Zurich, Switzerland.
21. Jenkins, KJ, Dennison P, Ebels, LJ and Mullins, LS, 2004, *3-D Polymer Grid Reinforcement of Asphalt for Rut Resistance*, CD Rom Proceedings of the 8th Conference on Asphalt Pavements for Southern Africa (CAPSA'04) 12 – 16 September 2004 ISBN Number: 1-920-01718-6 Sun City, South Africa Produced by: Document Transformation Technologies cc
22. Jenkins, K.J., Hugo, F. Van de Ven M.F.C. 1997. *Bitumen Emulsion Stabilized Paving Blocks - Development of Labour Intensive Manufacture and Construction Techniques*. Proceedings 2nd World Congress on Emulsions, Bordeaux, France, 23-26 September 1997, volume 3, Theme 4-1(b), pp. 257.1-12.
23. Jenkins, K.J., Hugo, F. Van de Ven M.F.C. 1997. *Development of Labour-Intensive Block Manufacture and Road Construction Techniques using Bitumen Emulsion and Foamed Bitumen Stabilised Paving Blocks*. Proceedings South African Transport Conference, Johannesburg, 1997, Vol.4A. Paper 8, pp. 1-12.
24. Kim S.M., Hugo F. and Roeset J.M. 1998. *Small-Scale Accelerated Pavement Testing*, Journal of Transportation Engineering, ASCE, Vol. 124, No.2, Mar/Apr 1998, pp. 117-122.

25. Kim S.M., Hugo, F., Roesset J.M. and White T.D. 1995. Dimensional Analysis of the Mobile Load Simulator on Pavements. Report 2914-3F, Center for Transportation Research, The University of Texas at Austin, May.
26. Kim Y Richard, 2006; *Validation of Material-Level Performance Models Using Third-Scale Model Mobile Load Simulator*, Paper presented at 85th Annual TRB Meeting, TRB Washington DC, January
27. Kruger J, Hartman AM and Loots, H, (2004), *Towards Developing a Test Protocol for Field Permanent Deformation Performance Evaluation using the MMLS3*, CD Rom Proceedings of the 8th Conference on Asphalt Pavements for Southern Africa (CAPSA'04) 12 – 16 September 2004 ISBN Number: 1-920-01718-6 Sun City, South Africa Produced by: Document Transformation Technologies cc
28. Lee, N-K.J., Hugo, F. and Stokoe II, K.H. 1993. Low temperature Model Load Simulator testing of model pavements in conjunction with SASW testing, Research Report 1934-2, Interim Report Center for Transportation Research, The University of Texas at Austin, November.
29. Lee Sugjoon and Kim Y. Richard 2004, *Development of Fatigue Cracking Test Protocol and Life Prediction Methodology Using MMLS3* Proceedings Fifth International RILEM Conference on Cracking, Limoges, France, May
30. Lee Jusang and Kim Y Richard, O'Quinn Emily, 2006; *Performance Evaluation of Bituminous Surface Treatment Using Third-Scale Model Mobile Loading Simulator*, Paper presented at 85th Annual TRB Meeting, TRB Washington DC, January
31. Lee, S. Joon, Seo, Y and Kim, Y. Richard, 2006; *Performance Prediction of Asphalt Pavements Loaded by MMLS3 Using Material-Level Laboratory Test Methods and Performance Models; CD-Rom Proceedings, ISAP 10th International Conference on Asphalt Pavements, Canada, August*
32. Liebenberg JJE, Rossmann D and Fletcher E., 2004, *Asphalt Mix Design and Construction: A Selection of Possible Pitfalls*, CD Rom Proceedings of the 8th Conference on Asphalt Pavements for Southern Africa (CAPSA'04) 12 – 16 September 2004 ISBN Number: 1-920-01718-6 Sun City, South Africa Produced by: Document Transformation Technologies cc
33. Lorio R, White MH and Essa I , 2004, *An Investigation into the CSIR Wheel-tracking Test with Reference to Two Projects*, CD Rom Proceedings of the 8th Conference on Asphalt Pavements for Southern Africa (CAPSA'04) 12 – 16 September 2004 ISBN Number: 1-920-01718-6 Sun City, South Africa Produced by: Document Transformation Technologies cc
34. Mallick, Rajib B., Pelland, Robert, Hugo, Frederick, 2005, *Use of accelerated loading equipment for determination of long-term moisture susceptibility of Hot Mix Asphalt*, CD-ROM Proceedings 84th annual meeting of the Transportation Research Board, January, Washington D.C.
35. Mallick, Rajib; Pelland, Robert, Dawes, Edmund, Bowker, Christopher; 2006, *Research and Implementation of Research Results for Improving Airfield Pavements at Boston-Logan International Airport*; Paper presented at 85th Annual TRB Meeting, TRB Washington DC, January
36. Martin Epps, A., Ahmed, T., Little, D.C., Hugo, F., Poolman, P. and Mikhail, M. 2002. *Performance prediction with the MMLS3 at WesTrack*. CD-Rom of Proceedings of the Ninth International Conference on Asphalt Pavements Copenhagen, 17 – 22 August.
37. Milne, T.I., Van de Ven, M.F.C. and Jenkins, K.J., 2002, *Towards a performance related seal design methods: New empirical test method using scaled down APT and theoretical performance model*, CD-Rom of Proceedings of the Ninth International Conference on Asphalt Pavements Copenhagen, 17 – 22 August.

38. Milne T.I., van de Ven M.F.C. and Jenkins K.J., (2004), Performance Based Road Surfacing Seals Evaluation: Empirical Testing, CD Rom Proceedings of the 8th Conference on Asphalt Pavements for Southern Africa (CAPSA'04) 12 – 16 September 2004 ISBN Number: 1-920-01718-6 Sun City, South Africa Produced by: Document Transformation Technologies cc
39. MLS Test Systems, 2002, MMLS3 Traffic Simulator Operator's Manual, MLS Test Systems, April.
40. MLS Test Systems, 2002, MLS Test Systems P900 Profilometer Operator's Manual, MLS Test Systems, April.
41. MLS Test Systems, 2002, MMLS Wet Pavement Heater Preliminary Users Manual, MLS Test Systems, June.
42. Molenaar, P., Hugo, F., Beukes, J., Catin, G., 2004, *Rehabilitation of RWY 03L-21R at Johannesburg International Airport: the quest for a suitable surfacing mix*. CD Rom Proceedings of the 8th Conference on Asphalt Pavements for Southern Africa (CAPSA'04) 12 – 16 September 2004 ISBN Number: 1-920-01718-6 Sun City, South Africa Produced by: Document Transformation Technologies cc
43. Nazarian S, Tandon V, Yuan D. 2002, Mechanistic Quality Management of Asphalt Concrete Layers with Seismic Methods, Journal of Testing and Evaluation, Sept Vol XX, No. X
44. Pretorius FJ, Jenkins KJ, Hugo F, Bondietti M. *Innovative Asphalt Construction: Case Studies on Cape Town International Airport and Kromboom Parkway*. XXIIInd PIARC World Road Congress, Durban, South Africa, 2003: 1-7.
45. Pretorius FJ, Jenkins KJ, Hugo F, Vietze, D. *Innovative Asphalt Mix Design and Construction Case Studies on Cape Town International Airport and Kromboom Parkway*. 21st ARRB and 11th REAAA Conference, Cairns, Queensland, Australia, Arcus Gibb 2003: 1-14.
46. Pretorius, FJ, Wise, JC and Henderson M, (2004) *Development of Application Differentiated Ultra-thin Asphalt Friction Courses for southern Africa*, CD Rom Proceedings of the 8th Conference on Asphalt Pavements for Southern Africa (CAPSA'04) 12 – 16 September 2004 ISBN Number: 1-920-01718-6 Sun City, South Africa Produced by: Document Transformation Technologies cc
47. Pretorius, FJ, Grobler JE, and Onraet J, (2004) *Development of a Fit-for Purpose Product Performance Specification System for Asphalt Mixes*, CD Rom Proceedings of the 8th Conference on Asphalt Pavements for Southern Africa (CAPSA'04) 12 – 16 September 2004 ISBN Number: 1-920-01718-6 Sun City, South Africa Produced by: Document Transformation Technologies cc
48. Pretorius FJ; Shongwe CN and Jenkins KJ; 2006; *Development of Reliable Performance Criteria for Ultra Thin and Thin Asphalt Friction Courses*; CD-Rom Proceedings, ISAP 10th International Conference on Asphalt Pavements, Canada, August
49. Partl, M.N., Hean, S. and Poulidakos, L. 2002. *Asphaltic Plug Joint Characterization and Performance Evaluation*. CD-Rom of Proceedings of the Ninth International Conference on Asphalt Pavements Copenhagen, 17 – 22 August.
50. Sampson LR, and Sadzik E, 2004, *The Gautrans Accelerated Pavement Testing (APT) Strategy 2004 - 2007*, CD Rom Proceedings of the 8th Conference on Asphalt Pavements for Southern Africa (CAPSA'04) 12 – 16 September 2004 ISBN Number: 1-920-01718-6 Sun City, South Africa Produced by: Document Transformation Technologies cc

51. Smit, A. de F., Hugo, F. and Epps, A. 1999. Report on the first Jacksboro MMLS tests. Report Number 1814-2. Center for Transportation Research at the University of Texas at Austin, December.
52. Smit, A. de F., Hugo, F. and Van de Ven, M. 1996. *MMLS testing of a Scaled Large Aggregate Base with binder variation*. Journal of the South African Institution of Civil Engineering, Johannesburg, South Africa, Vol. 38 Number 3.
53. Smit, A. dF., Walubita, L. , Jenkins, K. and Hugo, F. 2002. *The Model Mobile Load Simulator as a tool for evaluating Asphalt Performance under Wet Trafficking*. CD-Rom of Proceedings of the Ninth International Conference on Asphalt Pavements Copenhagen, 17 – 22 August.
54. Smit, A. de F., Hugo, F and Yeldirim, Y, 2004, *A Discussion of MMLS3 Performance Testing of Laboratory Prepared HMA Slabs and Briquettes Compared with Hamburg and APA Wheel Tracking Tests*, CD-ROM Proceedings Second International APT Conference, Seattle, USA.
55. Smit, André. de Fortier., Hugo, Fred. Rand, Dale Powell, Buzz, 2003, *Model Mobile Load Simulator Testing at National Centre for Asphalt Technology Test Track*, Transportation Research Record 1832, Journal of the Transportation Research Board, Washington, D. C. USA, October.
56. Smit A. de Fortier, , F. Hugo, J. Allen, and A. Epps, *Model Accelerated Pavement Testing as a Tool for Augmenting Full-Scale APT*, Proceedings of the 7th Conference on Asphalt Pavements for Southern Africa, Victoria Falls, Zimbabwe, August 29 - September 2, 1999.
57. Van de Ven, M., Smit, A.d.F., Jenkins, K. and Hugo, F. 1998. *Scaled Down APT Considerations for Viscoelastic Materials*, Journal of the Association of Asphalt Paving Technologists, Vol. 67.
58. Van der Merwe, C, Hechter, J., Theyse, L., Horak, E., Hugo, F. and Du Plessis, J.A. 1992. *Evaluation of the rehabilitation design of a BTB pavement and the effects of artificial aging using accelerated wheel load testing*, Proceedings of the 7th International Conference on Asphalt Pavements Nottingham, 16-20 August, Vol. 3, pp.356-379.
59. Walubita, L.F., Hugo, F. and Epps, A. 2000. Performance of rehabilitated lightweight aggregate asphalt concrete pavements under wet and heated model mobile load simulator trafficking: a comparative study with the TxMLS. Report Number 1814-3. Center for Transportation Research at the University of Texas at Austin, March.
60. Walubita, L.F., Hugo, F., Epps Martin, A. L. 2002, *Indirect tensile fatigue performance of asphalt after MMLS trafficking under different environmental conditions*, Journal of the SA Institution of Civil Engineering, Johannesburg, South Africa, Vol. 44, Number 3.
61. Wright DFH, Lowry D, and Jenkins, K, (2004) *The Use of Modified Asphalt at Busy City Intersections*, CD Rom Proceedings of the 8th Conference on Asphalt Pavements for Southern Africa (CAPSA'04) 12 – 16 September 2004 ISBN Number: 1-920-01718-6 Sun City, South Africa Produced by: Document Transformation Technologies cc