Contents of Volume 52 (2005)

Vol. 52 Nos. 1-3 July 2005

Mathematics and Mechanics of Granular Materials *Edited by:* James M. Hill and A.P.S. Selvadurai

J.M. Hill and A.P.S. Selvadurai: Mathematics and mechanics of granular materials	1–9
F. Alonso-Marroquín and H.J. Herrmann: The incremental response of soils. An investigation using a discrete-element model	11–34
E. Bauer: Initial response of a micro-polar hypoplastic material under plane shearing	35–51
R. Chambon: Some theoretical results about second-order work, uniqueness, existence and controllability independent of the constitutive equation	53–61
G.M. Cox, S.W. McCue, N. Thamwattana and J.M. Hill: Perturbation solutions for flow through symmetrical hoppers with inserts and asymmetrical wedge hoppers	63–91
B.S. Gardiner and A. Tordesillas: Micromechanical constitutive modelling of granular media: evolution and loss of contact in particle clusters	93–106
D. Harris and E.F. Grekova: A hyperbolic well-posed model for the flow of granular materials	107–135
S.C. Hendy: Towards a theory of granular plasticity	137–146
M. Hjiaj, W. Huang, K. Krabbenhøft and S.W. Sloan: Formulation of non-standard dissipative behavior of geomaterials	147–165
W. Huang, M. Hjiaj and S.W. Sloan: Bifurcation analysis for shear localization in non-polar and micro-polar hypoplastic continua	167–184
V.A. Osinov: Large-strain dynamic cavity expansion in a granular material	185–198
E. Pasternak and HB. Mühlhaus: Generalised homogenisation procedures for granular materials	199–229
J.F. Peters: Some fundamental aspects of the continuumization problem in gran- ular media	231–250
A.J.M. Spencer: Compression and shear of a layer of granular material	251–264
C. Tamagnini, F. Calvetti and G. Viggiani: An assessment of plasticity theories for modeling the incrementally nonlinear behavior of granular soils	265–291
G.J. Weir: Incompressible granular flow from wedge-shaped hoppers	293–305
H.P. Zhu and A.B. Yu: Micromechanic modeling and analysis of unsteady-state granular flow in a cylindrical hopper	307–320

416 Contents of Volume 52

Vol. 52 No. 4 August 2005

W. Gretler and R. Regenfelder: Variable-energy blast waves generated by a piston moving in a dusty gas	321–336
H.A. Jasmine and J.S.B. Gajjar: Convective and absolute instability in the incom- pressible boundary layer on a rotating disk in the presence of a uniform mag- netic field	337–353
S.R. Manam and T. Sahoo: Waves past porous structures in a two-layer fluid	355–377
K. Sadeghi and A. Incecik: Tensor properties of added-mass and damping coefficients	379–387
S.W. McCue, J.R. King and D.S. Riley: The extinction problem for three- dimensional inward solidification	389–409
Erratum	411
Author Index, Volume 52 (2005)	413
Contents of Volume 52 (2005)	415–416