

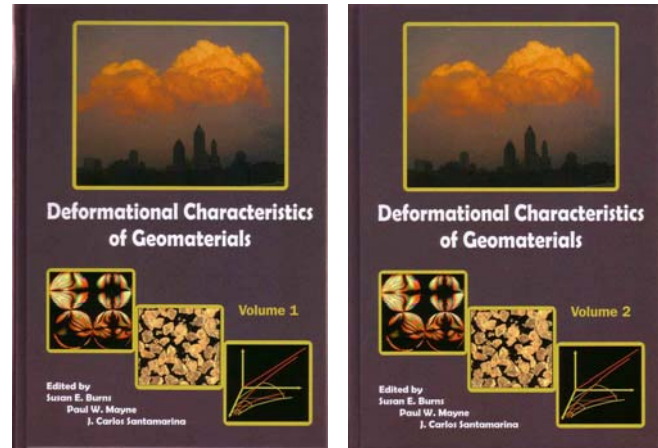
DEFORMATIONAL CHARACTERISTICS OF GEOMATERIALS (2008)

Edited by Susan E. Burns, Paul W. Mayne, and J. Carlos Santamarina

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**PROCEEDINGS OF THE FOURTH
INTERNATIONAL SYMPOSIUM ON
DEFORMATION CHARACTERISTICS OF
GEOMATERIALS**

**IS-ATLANTA 2008, 21-24 SEPTEMBER 2008,
ATLANTA, GEORGIA, USA**



This fourth international symposium explores the complex load-deformation response of geomaterials, including rheology, strain rate effects and aging; the role of structure in natural sediments and cementation in engineered fills; instabilities and the emergence of localizations; the effects of capillarity in unsaturated soils; inherent and stress induced anisotropy; and the implications of spatial variability. Laboratory tests, field studies, and numerical investigations are used to explore the various aspects of geomaterial response.

The relevance of the small-strain stiffness of soils, as represented by G_{max} , is a common thread in many of these studies. Research over the last two decades has shown the importance of G_{max} as the starting point for stress-strain trends in natural sediments, stabilized geomaterials such as compacted fills, and even young deposits such as mine tailings.

The previous efforts of ISSMGE Technical Committee TC 29 have successfully contributed to advancing the state of the art and state of practice in geoen지니어ing in relation to the rheology of soils and the relevance of G_{max} in deformation analysis. To date, we have had three Symposia, one Symposium in Print, and one special technical publication:

1. **PreFailure Deformation of Geomaterials** (1995), edited by Satoru Shibuya, Toshiyuki Mitachi, and Seiichi Miura, Volumes 1 and 2, Proceedings published by Balkema/Rotterdam; Event held in Sapporo, Japan from 12-14 September 1994.
2. **PreFailure Deformation Behaviour of Geomaterials** (1997), edited by Richard J. Jardine, M.C.R. Davies, David W. Hight, A.K.C. Smith, and S.E. Stallebrass, published as a part of *Geotechnique* by Thomas Telford, London.
3. **PreFailure Deformation Characteristics of Geomaterials** (1999), edited by Mike Jamiolkowski, Renato Lancellotta, and Diego LoPresti, Volumes 1 and 2, Proceedings published by Balkema, Rotterdam; Event held in Torino Italy from 28-30 September 1999.
4. **Advanced Laboratory Stress-Strain Testing of Geomaterials** (2001), edited by Fumio Tatsuoka, Satoru Shibuya, and R. Kuwano. Published by Swets & Zeitlinger, Lisse.
5. **Deformation Characteristics of Geomaterials** (2003), edited by Herve DiBenedetto, T. Doanh, H. Geoffroy, and C. Sauzeat, Volumes 1 and 2 (2005), Taylor & Francis Group, London; Event held in Lyon France from 22-24 September 2003.

Two-volume proceedings in 1000-pages hard cover paper plus CD provides 106 technical contributions and seven written keynote papers that will effectively contribute to advancing the state of knowledge in our field.

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