Record Nr. UNINA9910437893203321 Constitutive modeling of geomaterials : advances and new applications **Titolo** // Qiang Yang ...[et. al.] (eds.) Pubbl/distr/stampa Berlin; ; Heidelberg, : Springer-Verlag, 2012, c2013 **ISBN** 1-283-91256-2 3-642-32814-8 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (778 p.) Collana Springer series in geomechanics and geoengineering Altri autori (Persone) YangQiang 624.1/5136 Disciplina Soggetti Rock mechanics - Mathematical models Soil mechanics - Mathematical models Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Plenary Speakers -- Time-dependent Stress-strain Behavior of Geomaterials -- Constitutive Modeling within Critical State Soil Mechanics -- Multiscale and Multiphysics in Geomaterials -- Damage to Failure in Rock Structures.-Behaviour of Geomaterials -- Constitutive model -- Application. The Second International Symposium on Constitutive Modeling of Sommario/riassunto Geomaterials: Advances and New Applications (IS-Model 2012), is to be held in Beijing, China, during October 15-16, 2012. The symposium is organized by Tsinghua University, the International Association for Computer Methods and Advances in Geomechanics (IACMAG), the Committee of Numerical and Physical Modeling of Rock Mass, Chinese Society for Rock Mechanics and Engineering, and the Committee of Constitutive Relations and Strength Theory, China Institution of Soil Mechanics and Geotechnical Engineering, China Civil Engineering Society. This Symposium follows the first successful International Workshop on Constitutive Modeling held in Hong Kong, which was organized by Prof. JH Yin in 2007. Constitutive modeling of geomaterials has been an active research area for a long period of time.

Different approaches have been used in the development of various constitutive models. A number of models have been implemented in the numerical analyses of geotechnical structures. The objective of the

symposium is to provide a forum for researchers and engineers

working or interested in the area of constitutive modeling to meet together and share new ideas, achievements and experiences through presentations and discussions. Emphasis is placed on recent advances of constitutive modeling and its applications in both theoretic and experimental aspects. Six famous scholars have been invited for the plenary speeches of the symposiums. Some prominent scholars have been invited to organize four specialized workshops on hot topics, including "Time-dependent stress-strain behavior of geomaterials", "Constitutive modeling within critical state soil mechanics", "Multiscale and multiphysics in geomaterials", and "Damage to failure in rock structures". A total of 49 papers are included in the above topics. In addition, 51 papers are grouped under three topics covering "Behaviour of geomaterials", "Constitutive model", and "Applications". The editors expect that the book can be helpful as a reference to all those in the field of constitutive modeling of geomaterials.