



Mechanics of Swelling

By Karalis, Theodoros K.

Book Condition: New. Publisher/Verlag: Springer, Berlin | From Clays to Living Cells and Tissues | Provided here is up-to-date and in-depth information on various swelling phenomena occurring in living organisms and in the unanimated world. The book is arranged in six parts, which cover fundamentals, special topics, analytical and experimental methods and applications relevant to swelling in soils, cells and tissues of plants and animals. Specifically, it includes all aspects of osmotic phenomena leading to swelling in clays, cells, tissues, gels, blisters, colloidal systems, surfaces and membranes. Forces between surfactant, lipid and protein membranes and in polymeric systems are also considered. | 1. Swelling in Soils.- Flow and volume change in soils and other porous media, and in tissues.- Water movement and volume change in swelling systems.- Thermodynamics of soils swelling non-hydrostatically.- Operational aspects of the mechanics of deforming porous media: theory and application to expansive soils.- The osmotic role in the behaviour of swelling clay soils.- 2. Plant Growth.- Osmotic adjustment in plant cells exposed to drought and temperature stress: can a cause and effect hypothesis be formulated and tested?.- On the kinematics and dynamics of plant growth.- Regeneration in the root apex: Modelling study by means of the growth tensor.-...



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Reviews

An extremely wonderful book with perfect and lucid information. This can be for all those who state there had not been a really worth reading through. Its been written in an exceptionally easy way and it is only after i finished reading this ebook in which actually modified me, alter the way i really believe.

-- **Kaelyn Reichel**

It is one of the most popular books. I am quite late in starting to read this one, but better than never. Once you begin to read the book, it is extremely difficult to leave it before concluding.

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