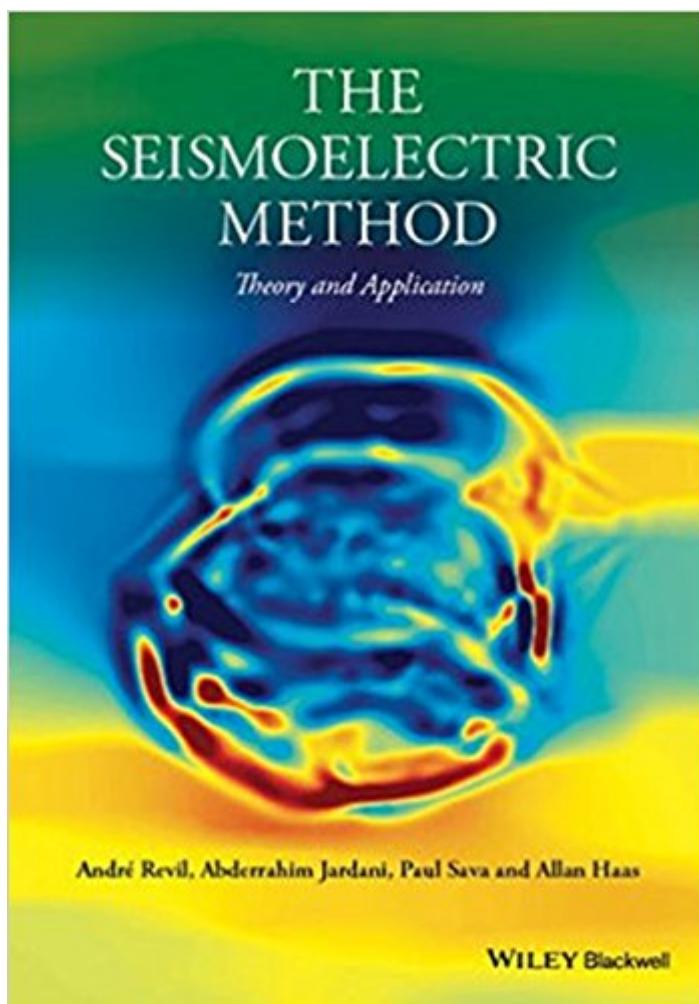


The book was found

# The Seismolectric Method: Theory And Application



## Synopsis

The seismoelectric method consists of measuring electromagnetic signals associated with the propagation of seismic waves or seismic sources in porous media. This method is useful in an increasing number of applications, for example to characterize aquifers, contaminant plumes or the vadose zone. This book provides the first full overview of the fundamental concepts of this method. It begins with a historical perspective, provides a full explanation of the fundamental mechanisms, laboratory investigations, and the formulation of the forward and inverse problems. It provides a recent extension of the theory to two-phase flow conditions, and a new approach called seismoelectric beamforming. It concludes with a chapter presenting a perspective on the method. This book is a key reference for academic researchers in geophysics, environmental geosciences, geohydrology, environmental engineering and geotechnical engineering. It will also be valuable reading for graduate courses dealing with seismic wave propagation and related electromagnetic effects.

## Book Information

Hardcover: 264 pages

Publisher: Wiley-Blackwell; 1 edition (June 15, 2015)

Language: English

ISBN-10: 1118660269

ISBN-13: 978-1118660263

Product Dimensions: 7.7 x 0.8 x 10 inches

Shipping Weight: 1.6 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #713,779 in Books (See Top 100 in Books) #149 in Books > Engineering & Transportation > Engineering > Energy Production & Extraction > Mining #168 in Books > Science & Math > Earth Sciences > Geophysics #1272 in Books > Science & Math > Earth Sciences > Geology

## Customer Reviews

The seismoelectric method consists of measuring electromagnetic signals associated with the propagation of seismic waves or seismic sources in porous media. This method is useful in an increasing number of applications, for example to characterize aquifers, contaminant plumes or the vadose zone. This book provides the first full overview of the fundamental concepts of this method. It begins with a historical perspective, provides a full explanation of the fundamental mechanisms,

laboratory investigations, and the formulation of the forward and inverse problems. It provides a recent extension of the theory to two-phase flow conditions, and a new approach called seismoelectric beamforming. It concludes with a chapter presenting a perspective on the method. This book is a key reference for academic researchers in geophysics, environmental geosciences, geohydrology, environmental engineering and geotechnical engineering. It will also be valuable reading for graduate courses dealing with seismic wave propagation and related electromagnetic effects.

AndrÃ© Revil is Associate Professor at the Colorado School of Mines and Directeur de Recherche at the National Centre for Scientific Research (CNRS) in France. His research focuses on the development of new methods in petrophysics, and the development of electrical and electromagnetic geophysical methods applied to geothermal systems, water resources, and oil and gas reservoirs. Abderrahim Jardani is Associate Professor at the University of Rouen, where he also obtained his PhD in Geophysics 2007. His research interests centre on environmental geophysics, mathematical modeling of hydrologic systems and inverse problems. Paul Sava is an Associate Professor of Geophysics at Colorado School of Mines. He specializes in imaging and tomography using seismic and electromagnetic wavefields, stochastic imaging and inversion, computational methods for wave propagation, numeric optimization and high performance computing. Allan Haas is currently working at hydroGEOPHYSICS, Inc. as a Senior Engineering Geophysicist. He graduated with a PhD in Geophysics at the Colorado School of Mines, on December 13, 2013. During his PhD research, Allan investigated the measurable electrical signals associated with leakages in wells, hydraulic fracturing, and subsurface fracture flow.

[Download to continue reading...](#)

The Seismoelectric Method: Theory and Application Model of Human Occupation: Theory and Application (Model of Human Occupation: Theory & Application) Dynamics: Theory and Application of Kane's Method Transcultural Nursing Theory and Models: Application in Nursing Education, Practice, and Administration (Sager, Transcultural Nursing Theory and Models) Fretboard Theory: Complete Guitar Theory Including Scales, Chords, Progressions, Modes, Song Application and More. Library of Congress Subject Headings: Principles and Application, 4th Edition (Library of Congress Subject Headings: Principles & Application (Pape) Pesticide Application Log (Logbook, Journal - 96 pages, 5 x 8 inches): Pesticide Application Logbook (Deep Wine Cover, Small) (Unique Logbook/Record Books) Secure Web Application Deployment using OWASP Standards: An expert way of Secure Web Application deployment Alfred's Beginning Drumset Method: Learn How to Play

Drumset with this Innovative Method (Alfred's Drumset Method) Easy Songs for Mandolin: Supplementary Songbook to the Hal Leonard Mandolin Method (Hal Leonard Mandolin Method: Supplement to Any Mandolin Method) Guitar for Kids Method & Songbook: Hal Leonard Guitar Method Bk/online audio (Hal Leonard Guitar Method (Songbooks)) Contemporary Music Theory - Level One: A Complete Harmony and Theory Method for the Pop and Jazz Musician Structural Dynamics of Earthquake Engineering: Theory and Application Using Mathematica and Matlab (Woodhead Publishing Series in Civil and Structural Engineering) Leadership Roles and Management Functions in Nursing: Theory and Application (Marquis, Leadership Roles and Management Functions in Nursing) Music Theory: From Beginner to Expert - The Ultimate Step-By-Step Guide to Understanding and Learning Music Theory Effortlessly (Music Theory Mastery Book 1) Leadership Roles and Management Functions in Nursing: Theory and Application Exercise Physiology: Theory and Application to Fitness and Performance Fracture Mechanics of Metals, Composites, Welds, and Bolted Joints: Application of LEFM, EPFM, and FMDM Theory CRC Handbook of Lubrication (Theory and Practice of Tribiology), Volume I: Application and Maintenance Measurement and Instrumentation, Second Edition: Theory and Application

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)