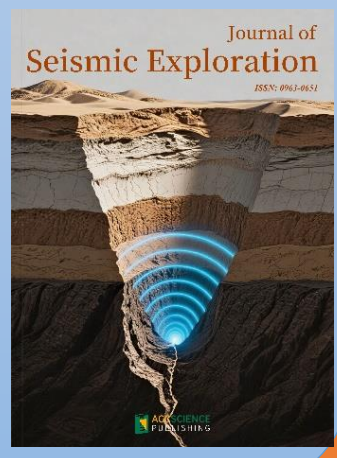
Journal of Seismic Exploration

Seismic Wave Propagation Theories and Reservoir Characterization Technologies for Complex Anisotropic Media

2024 Impact Factor 0.4 WOS



CALL FOR PAPERS 2025

Submission Deadline:
15 June 2026

AIMS & SCOPE

Seismic wave anisotropy is widely spread in Earth's upper crust and notably influences elastic wave behaviors. As a simplified anisotropic system, vertically transverse isotropy (VTI) typically depicts the polar anisotropy of shale layers and thin-bedded formations, which could be highly practical for sedimentary rocks and probably the most extensively studied anisotropic system. When azimuthal anisotropy (often induced by aligned fractures or regional stress) is also present, the coupled anisotropy is more complex with lower symmetries. Given the profound geological background of seismic anisotropy, accurate modeling and treatment of anisotropic wave signatures will contribute to both subsurface imaging and property characterization. This special issue invites cutting-edge researches on seismic anisotropy, including but not limited to rock physics theories, elastic wave propagation mechanisms, data acquisition and processing techniques, reservoir characterization methodologies, and case studies.

KEYWORDS

- seismic anisotropy
- complex reservoir characterization
- elastic wave propagation
- anisotropic rock physics
- shale reservoir
- fractured reservoir

Guest Editors

Feng Zhang
zhangfeng@cup.edu.cn
China University of Petroleum (Beijing)

Jun Lu
lujun615@163.com
China University of Geosciences, Beijing

Song Jin
jinsong369@hotmail.com
China University of Geosciences (Wuhan)

Cong Luo
Lishang0228@163.com
Hohai University

Qizhen Du
multicomponent@163.com
China University of Petroleum (East China)

Editorial Office:
jse.office@accscience.sg;
AccScience Publishing
9 Raffles Place, Republic Plaza 1 #06-00,
Singapore 048619

JSE Homepage

Submit at

ACCSCIENCE PUBLISHING