

BOOKS EDITORIAL BOARD

2024-2025 REPORT

Committee chair: Umair Bin Waheed

Committee members: Philip Armstrong, Edward Biegert, Yongyi Li, Wei Liu, Tijmen Jan Moser, Liam O'Suilleabhain, Yingcai Zheng

Board liaison: Kyle Spikes

Staff liaisons: Jennifer Cobb

EXECUTIVE SUMMARY

The SEG Books Program continues to play a pivotal role in advancing the Society's mission to disseminate high-quality, state-of-the-art knowledge in applied geophysics. During the 2024-2025 term, the Books Editorial Board successfully guided three major titles to publication, with several additional projects under review or in development.

The program's accomplishments reflect the ongoing dedication of the board members and the strong leadership of Chair Umair Bin Waheed, with invaluable support from Jennifer Cobb, who continues to ensure the smooth management of publication logistics and coordination with authors.

HIGHLIGHTS FROM THE PAST YEAR

Books Published

The 2024-2025 term saw the successful publication of three significant titles that broaden the reach and diversity of the SEG catalog:

1. *Essentials of Seismic Attributes and Impedance Inversion*

Authors: Satinder Chopra and Kurt Marfurt

Published: October 2024

This comprehensive and richly illustrated resource contains more than 1,000 figures, offering an authoritative overview of seismic attributes and inversion methodologies. The book effectively combines theory, workflows, and case studies, while also emphasizing common pitfalls in interpretation. Its depth and clarity make it a cornerstone reference for geophysicists and interpreters alike.

2. *Seismic Methods for Urban Engineers*

Authors: Yunyue Elita Li and Arthur Cheng

Published: August 2025

Developed alongside the 2025-2026 Distinguished Instructor Short Course (DISC), this title bridges the gap between geophysics and geotechnical engineering. It provides a practical and conceptual guide to applying seismic methods in urban and infrastructural

environments, offering valuable insight for both engineers and geophysicists involved in geotechnical assessments.

3. “Surely You’re Joking, Mr. Thomsen! ” Adventures of a Petroleum Scientist

Author: Leon Thomsen

Published: August 2025

This memoir offers a unique perspective on the intersection of science, technology, and society through the life and career of one of applied geophysics’ most influential figures. It connects the curiosity-driven world of science with the industrial pursuit of hydrocarbons and energy sustainability. Thomsen’s reflections provide a deeply human account of the technological evolution of the oil industry and its role in addressing global energy challenges.

Books in Production

- ***Physics and Data-Driven Seismic Data Analysis: A Narrative of Two Approaches***

Author: Mrinal Sen

This forthcoming book, accompanying Mrinal Sen’s Distinguished Instructor Short Course, is in the final stages of production. It explores the complementary roles of physics-based and data-driven methods in modern seismic analysis, illustrating how the two paradigms can converge to enhance interpretability and efficiency.

Projects in Development

Several promising book proposals have been accepted and are currently in various stages of development, including those by Sergey Fomel, Anton Ziolkowski, Umair Bin Waheed et al., Dhananjay Kumar, Binode Chetia, and Xianhuai Zhu. These works collectively address topics ranging from advanced seismic imaging and machine learning to innovative computational methods, ensuring that the SEG Books Program remains at the forefront of scientific publishing in applied geophysics.

Challenge and Outlook

The board continues to operate efficiently despite a lean staffing structure. The absence of a dedicated books program staff position remains a logistical challenge; however, the continued dedication of the staff and the volunteer contributions of the board have sustained productivity and quality.

Looking ahead, the focus will be on: (1) expanding the diversity of topics and author representation, (2) enhancing digital engagement and marketing strategies, and (3) streamlining workflows for proposal review and production.

The 2024-2025 term marks another successful year for the SEG Books Program, characterized by impactful publications, strong leadership, and continued innovation. Upcoming projects promise to further strengthen SEG’s role as a global leader in geophysical education and professional development.