International Handbook of Earthquake and Engineering Seismology, Part B

Academic Press, a div. of Elsevier Science, 2003, 1,040 pages with CD-ROM, $150.00

The 2003 International Handbook of Earthquake and Engineering Seismology, Part B, from Academic Press is a long-awaited comprehensive treatise. Part B encompasses 1,040 pages and covers Chapters 57 through 90. There is a CD-ROM in the rear pocket with supplemental information (pdf), field photographs (jpg) taken in the aftermath of large earthquakes, and additional digital programs and formulae. For the purposes of this review, a selected number of chapter titles and authors are listed that will be of interest principally to North American seismologists and engineering geologists:

Chapter 57, Strong-Motion Seismology, by Professor John G. Anderson, Univ. Nevada, Reno
Chapter 58, Strong-Motion Data Processing, by Shakal, Huang, & Grazier of the Calif. Geological Survey
Chapter 59, Estimation of Strong Seismic Ground Motions
   by Professor Bruce A. Bolt and Norman Abrahamson
Chapter 60, Strong-Motion Attenuation Relations by Kenneth Campbell
Chapter 61, Site Effects on Strong Ground Motions by K. Hawase
Chapter 65, Seismic Hazards & Risk Assessment in Engineering Practice
   by Paul Somerville of URS and Yoshi Moriwaki of Geopentech
Chapter 67, Earthquake Response of Buildings by Professor Paul Jennings of Caltech
Chapter 70, Liquefaction Mechanisms by Professor Leslie Youd
Chapter 71, Soil Liquefaction during Earthquakes by Professor Jean Bardet of USC
Chapter 72, Earthquake Prediction - an overview by Professor Hiroo Kanamori of Caltech
Chapter 79, includes 200 pages of national reports, somewhat like a United Nations report of seismology and earthquake engineering in each country.
Chapter 89, Biographies of Seismologists and Earthquake Engineers by Professor Benjamin Howell

This comprehensive treatise is recommended, especially as a library resource for working seismologists and earthquake engineers. Each chapter is written by a team of specialists, so the extensive bibliography within each chapter is a reliable source for current citations in seismology. The editors, Dr. William H. Lee, USGS Menlo Park; Dr. Hiroo Kanamori, Caltech; Dr. Paul Jennings, Caltech; and Dr. Carl Kisslinger, University of Colorado are to be commended. The book contains a Forward by Dr. Frank Press of the National Academy of Sciences. The hard-bound treatise is 8×11-inch format and nicely printed on heavy enamel paper. This represents a "reasonable value" for library purchase, even when library budgets are limited. I purchased my copy at the American Geophysical Union meeting in San Francisco for a 20% discount at the pre-publication price.

★★★★
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August 9, 2003