

The following relevant material for the C16 webpages has been collected by Engineering Geology students of Prof. Scott Burns at Portland State University (USA) in the framework of a students assignment. This material has not yet been screened and commented nor approved by the C16 chair and membership.

BOOKS

- Priwer, Shana, and Philips, Cynthia, 2009, [Ancient Monuments](#): Sharp Focus, 112 p.

Grade 5–9—These books examine the "science behind the structures that are part of our everyday lives." The authors discuss the sociohistorical and mathematical concepts behind, for example, "Mesoamerican Architecture" (Monuments) and "Transportation Canals and Locks" (Dams) in great depth. These informative books are a bit dry, but ideal for dedicated researchers. Diagrams, charts, and full-color photographs are appropriately placed and well captioned. An extensive glossary and index round out each of the meticulous surveys. Though textbook layout, dense information, and vocabulary-heavy sentences limit the titles to use as report resources, they will be welcome additions. —*Rebecca Dash, New York Public Library*

- Landels, J.G., 2000, [Engineering in the Ancient World](#): University of California Press, 240 p.

In his classic book, J. G. Landels describes the technological advances of the Greeks and Romans with erudition and enthusiasm. He provides an important introduction to engineering, writing about power and energy sources, water engineering, cranes, and transportation devices. From aqueducts to catapults, he attempts to envision machines as they may have worked in the ancient world. He then traces the path of knowledge taken by early thinkers-including Plato, Pliny, and Archimedes-in developing early theories of engineering and physics. —*Amazon.com Product Description*

- Scarre, Chris, 1999, [The Seventy Wonders of the Ancient World: The Great Monuments and how they were built](#): Thames and Hudson, 304 p.

This authoritative and profusely illustrated compendium celebrates the achievements of those ancient builders who created huge and impressive structures without the benefit of modern technology. Expanding upon the theme of the traditional Seven Wonders, The Seventy Wonders of the Ancient World incorporates marvels from around the globe, spanning the centuries from the first stone monuments of the fifth millennium B.C. to the Great Temple of the Aztecs in the sixteenth century A.D. The shaping of the Great Sphinx at Giza, the raising of the stones at Stonehenge, the laying out of the Nazca Lines on the face of the Peruvian desert, or the construction of the Great Wall of China (probably the greatest building project ever attempted in ancient times) are all described and explained in light of the most up-to-date archaeological research. So too are the erection of Egyptian obelisks and Easter Island statues, and the building of Roman roads and Inca bridges. Neglected monuments such as the Giant Stelae of Aksum or the mountain palace at Sigiriya are set beside the great Baths of Caracalla in Rome and the palace of Persepolis. Packed with fact files, diagrams, photographs, and newly commissioned perspective views, The Seventy Wonders of

the Ancient World provides a testament to the skill of the ancient engineers and architects who created lasting memorials--some for practical ends, others for prestige and propaganda--that have continued to impress successive generations through the ages. —*Amazon.com Product Description*

- Sprague De Camp, L., 1987, [Ancient Engineers](#): Ballantine Books, 464 p.

A reasonably scholarly but nonetheless accessible history of the great engineering feats of the human race up to the Renaissance, including a great chapter on Oriental architecture, a topic often neglected by such surveys. —*Amazon.com Product Description*

- National Research Council, 1982, [Conservation of Historic Stone Buildings and Monuments](#): National Academies Press, Committee on Conservation of Historic Stone Buildings and Monuments, National Materials Advisory Board, 379 p.

Discusses principles of conservation, geological sources of building stone, physical properties of building stone, problems in the deterioration of stone, the mechanism of masonry decay through crystallization, etc.