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Compendium of Polymer Terminology and Nomenclature: IUPÁC Recommendations, 2008 (Book Review)

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MARC

Polymer Division, International Union of Pure and Applied Chemistry.

Compendium of polymer terminology and nomenclature: IUPAC recommendations, 2008. Royal Society of Chemistry, 2009. 443p bibl index ISBN 9780854044917, \$279.00

While most introductory polymer course resources give a brief description of the rules for naming polymers and polymer terminology, this is the only book solely dedicated to that end. Commonly referred to as the "Purple Book," this is the definitive guide to the nomenclature of polymeric systems produced by the International Union of Pure and Applied Chemistry, the primary arbitrators of all things related to naming chemical structures. The first half of the volume is devoted to terminology in polymer science. This section is more like a miniencyclopedia than simply a glossary. The second half of the book describes polymer nomenclature. Both parts of the volume, which are laid out in outline format, can be a bit tough to navigate. Fortunately, there are extensive indexes for both sections. This work can serve as an excellent resource for anyone involved in polymer science, either as a researcher or as an instructor. Summing Up: Recommended. ★★ Chemistry reference collections serving graduate students through professionals.—J. H. Glans, Sacred Heart University

Earth Science

47-0285 QE653 MARC

Brasier, Martin. Darwin's lost world: the hidden history of animal life. Oxford, 2009. 304p bibl index ISBN 9780199548972, \$34.95

Charles Darwin assiduously sought facts that would both favor and undermine his hypotheses before he published them. The sudden appearance of diverse, complex animal fossils in the Cambrian period and their absence from earlier rocks threatened his hypothesis of the origin of species by descent with modification. Although by his sixth edition (1872) of The Origin of Species Darwin incorporated new knowledge of earlier animals, the Precambrian largely remained "Darwin's Lost World." Accurately subtitled The Hidden History of Animal Life, this discourse by Brasier (paleobiology, Oxford Univ., UK) is part travelogue (without maps of the out-of-the-way geological formations he visited around the world), part memoir (not chronological by author's career or geologic record), and part commentary on multicellular life near the Cambrian-Precambrian boundary 543 million years ago. Brasier's research has contributed substantially to our present knowledge. Writing lightly, sometimes delightfully and poetically, he treads equally gently on the fossils. Readers with some knowledge of Earth's geologic history (no time table is provided) and of invertebrates (illustrations range from very rough sketches to a few excellent color photos) will appreciate the book. However, the too-limited explanations of important fossils and concepts introduced may frustrate comprehension by interested novices. Summing Up: Recommended. ★★ Graduate students, researchers, faculty, and professionals.—A. J. Kohn, emeritus, University of Washington

47-0286 GB2603 2008-6508 MARC DeWalle, David R. **Principles of snow hydrology**, by David R. De-Walle and Albert Rango. Cambridge, 2008. 410p bibl index ISBN 0521823625, \$150.00; ISBN 9780521823623, \$150.00

Principles of Snow Hydrology offers the most up-to-date and extensive treatment available of a scientific field whose importance has been widely

recognized in recent years. In this 12-chapter work, DeWalle (Penn State) and Rango (USDA ARS) discuss snow hydrology fundamentals and provide current information on numerous topics such as "remote sensing, blowing snow, soil frost, melt prediction, climate change, and avalanches." Chapters include "Snow Climatology and Snow Distribution," "Snowpack Condition," "Snowfall, Snowpack, and Meltwater Chemistry," "Snowpack Energy Exchange: Basic Theory," and "Snowmelt-Runoff Processes." The book also contains two chapters on energy exchange, two chapters on modeling, and a final chapter discussing the management of snow. Relevant subject specialists have reviewed and provided input on individual chapters. The well-produced volume is profusely illustrated by line drawings, graphs, and black-and-white and color photographs. This major work, written by authors who are preeminent in their fields, should prove a standard reference for many years to come. Copious references, extensive index, strong binding. Summing Up: Highly recommended. *** Upper-division undergraduates through professionals.—J. D. Ives, emeritus, Carleton University

Fleury, Spencer. Land use policy and practice on karst terrains: living on limestone. Springer, 2009. 187p index afp ISBN 9781402096693, \$99.00

This book is not one's typical karst book since it does not focus on geology, processes, biology, etc. Rather, Fleury, a science/technical writer degreed in environmental science and geography, addresses the problems of developing and implementing land use policies and regulations that reflect the unique problems associated with karstic terranes. The six-chapter work begins by briefly introducing basic karst concepts, but recommends that the reader consult more comprehensive works for further information. It moves on to review land use policies and regulations already in play and documents the large range of laws that exist from place to place. The third chapter reviews and discusses a survey conducted to learn just how much planners really know and understand about karst. Chapter 4 discusses some practical implications when karst regulations are put in place, and chapter 5 examines land use regulations applied to karst terranes in rural settings, which are typically much different than those applied to urban settings. The final chapter discusses possible future directions for improved policies and regulations. The book finishes with a glossary of terms, results of the survey discussed in chapter 3, and color plates. Summing Up: Recommended. ★★ All readers interested in karst.—M. S. Field, U.S. Environmental Protection Agency

47-0288 QE721 2008-21095 CIP **For the rock record: geologists on intelligent design,** ed. by Jill S. Schneiderman and Warren D. Allmon. California, 2009. 261p bibl index afp ISBN 9780520257580, \$55.00; ISBN 9780520257597 pbk,

For the Rock Record is a collection of ten essays by geologists and paleontologists addressing various aspects of the intelligent design (ID) movement from a geological perspective. ID is the religiously motivated belief that biological complexity in nature is the result of an "intelligent designer," not naturalistic evolutionary processes. Divided into three parts, "Rocks and Bones," "Education, Politics and Philosophy," and "On Religion," the book provides a much-needed response to the ID movement from the geological community, as well as some thoughts about the nature of science, the role of methodological naturalism, and the possible accommodation of religious belief within the practice of science. The work contains some flaws. For example, a few essays are

\$24.95