writing. The volume's extensive index will guide readers into and through the clearly subdivided 13 chapters, each with referenced endnotes. Chapter titles deliberately suggest who might be best targeted as a reader, e.g., readers interested in food engineering will enjoy "Nutritional and Culinary Thermodynamics," while those interested in cooking as a profession will like "The Empowerment of Chefs" and "The Science That Fascinates Chefs." The discussion of "Homo gastronomicus" will interest all audiences. But basically the book is about the molecules that are shaped into the structures (and fluids, odors, and colors) that delight and nurture us. **Summing Up:** Highly recommended. ★★★ All readership levels.—*M. Kroger, emeritus, Pennsylvania State University, University Park Campus*

50-5556 Q175 2012-19142 CIP
Arbesman, Samuel. **The half-life of facts: why everything we know has an expiration date.** Current, 2012. 242p index ISBN 9781591844723, $25.95

This book is a very good read for anyone who uses facts—basically everyone. The idea that facts have a half-life and do not last forever is a consequence of the introduction of better measurement techniques and new information. Arbesman (Kauffman Foundation and Harvard), an applied mathematician and network scientist, explains that most people seem unaware that facts are changing except within their own fields of interest, but practically everything is changing, ever more rapidly it seems. Some facts, such as the daily population of the US, change very quickly, while other facts change ever so slowly, like the height of Mount Everest, which is being pushed upward by colliding seismic plates. According to the author, examples abound in all areas of human endeavor, including education, science, technology, and medicine. The evolution of human behavior plays a critical role in people's semi-blindness to these changing facts all around them. The book includes numerous notes with references and a complete index for readers to explore related topics. **Summing Up:** Recommended. ★★ All readership levels.—*F. Potter, formerly, University of California, Irvine*

50-5557 HD8039 2012-028740 CIP
Foege, Alec. **The tinkerers: the amateurs, DIYers, and inventors who make America great.** Basic Books, 2013. 216p index ISBN 9780465009237, $26.99

In this book of related short essays and interviews, author/journalist Foege (*Right of the Dial*, CH, Sep'08, 46-0103; senior writer, *People* magazine; formerly, contributing editor, *Rolling Stone*) develops his thesis that America has a unique tinkering spirit that led the US to become the world's economic superpower. Though this spirit has been lost in recent years, Foege believes it is still recoverable. While at several points asserting a distinction between tinkering, invention, and innovation, the author uses examples of all three interchangeably to support his argument. Foege's numerous stories include well-documented cases like Xerox PARC (Palo Alto Research Center) and more unexpected contributions like the financial engineering that created credit default swap derivatives. At times connections are unclear, as in the juxtaposition of Edison's inventive tinkering on the phonograph and the social tinkering of the RAND Corporation in the post-WW II period. The author intends that his "proudly dilettantish but equally passionate" storytelling will inspire readers to become more interested in tinkering and to support this important activity. Secondary source material is included in a notes chapter at the end. **Summing Up:** Recommended. ★★ All levels/libraries.—*S. A. Curtis, University of Missouri—Kansas City*

50-5558 Q175 2012-16520 CIP
Gauch, Hugh G., Jr. **Scientific method in brief.** Cambridge, 2012. 288p bibl index ISBN 9781107666726 pbk, $39.99

The mission of this wonderful book is to enhance both scientists' and nonscientists' appreciation of science. According to Gauch (agriculture and life sciences, Cornell Univ.), science should be recognized as one of the liberal arts. Scientists can enhance their productivity through a deeper understanding of the nature of science, and everyone can benefit from a discussion of the interrelationship of the sciences and the humanities. Condensed from the author's *Scientific Method in Practice* (CH, Jun'03, 40-5769), this work, valuable for prospective and practicing scientists, can be used in the classroom or for individual study. After the introductory chapter, the next few chapters discuss enhanced perspectives of science via rationality, truth, objectivity, realism, common sense, presuppositions, and powers and limits. Later chapters, focused on scientific productivity, include "Deductive Logic," "Probability," "Inductive Logic and Statistics," "Parsimony and Efficiency," and "Case Studies" (in seven disciplines). The book ends with chapters on ethics and education in science. Each of the 14 chapters includes summaries and questions at the end. Excellent references and an index support the text. This reviewer wishes this book had been available when he was a student. **Summing Up:** Highly recommended. ★★★ Science students, lower-division undergraduates through graduate students; all scientists and their collaborators in the humanities.—*R. E. Buntrock, formerly, University of Maine*

50-5559 QC903 2012-15593 CIP
Hewitt, William F. **A newer world: politics, money, technology, and what's really being done to solve the climate crisis.** New Hampshire, 2013. 321p index afp ISBN 9781584659631, $27.95; ISBN 9781611683516 e-book, $24.99

Climate change is arguably today's most important policy issue. As the world watches its impacts, including ocean acidification, glacial melting, and multiple years of megastorms, people also tend to hear a lot about what is not being done. For instance, the US is not participating in the Kyoto Protocol and Congress was not able to pass a major, federal greenhouse gas emissions cap-and-trade bill. Hewitt (Hewitt Communications), an environmental activist and journalist, points out that these observations, though important, can also cause people to lose track of how much society is doing with regard to climate change mitigation. He summarizes this while providing an excellent overview of US, EU, and international climate change science and policy that gives context for his descriptions of a range of achievements. These include not just innovative policy making at local, state, national, and international scales, but also the development of a range of increasingly economic and prevalent alternative energy production and conservation technologies. This book will be valuable and interesting to general readers, scholars/students desiring accessible information on climate change policy, and faculty teaching any level of an energy or climate change-related class. **Summing Up:** Highly recommended. ★★★ Lower-division undergraduates through researchers/faculty; general audiences.—*K. E. Halvorsen, Michigan Technological University*

50-5560 HB871 2012-13925 CIP
Life on the brink: environmentalists confront overpopulation, ed. by Philip Cafaro and Eileen Crist. Georgia, 2012. 342p bibl index afp ISBN 9780820340487, $69.95; ISBN 9780820343853 pbk, $24.95

This anthology presents a critical message: Earth is in trouble. Nineteen expert contributors (plus editors Cafaro and Crist) provide