

belongs to Louis de Broglie, who first postulated electron waves in 1923. The author also gives credit incompletely for the origin of string theory, with no mention of the seminal contributions by, for example, Gabriele Veneziano, Yoichiro Nambu, or Holger Bech Nielsen.

Randall is quite willing to share her views. For instance, she is “agnostic” about string theory, a compelling theory that motivates the book’s speculation. She personally does not believe extra dimensions are large—that is, directly detectable at colliders—but she does admit to believing in some form of extra dimensions. Quite frankly, I agree with all of the above views. In the book, Randall describes a humorous episode in 2001 when well-meaning conference organizers, who misunderstood her work, invited her to speak on “large” extra dimensions, which would exclude her own papers!

All in all, *Warped Passages* is a major accomplishment. The intended readership includes adult nonscientists and high-school students who want to learn about scientific research. One can hope it will help convince politicians to support the expensive research and encourage the public at large to embrace science.

Make Your Mark in Science: Creativity, Presenting, Publishing, and Patents—A Guide for Young Scientists

Claus Ascheron and Angela Kickuth
Wiley, Hoboken, NJ, 2005.

\$29.95 paper (235 pp.).

ISBN 0-471-65733-6

Make Your Mark in Science: Creativity, Presenting, Publishing, and Patents—A Guide for Young Scientists, by physicists Claus Ascheron and Angela Kickuth, is intended as a guide for young scientists who face the challenges of doing creative scientific work and producing it in concrete form. Although most of its examples are, of course, drawn from physics, the book is just as relevant to other scientific fields.

Chapters 3, 5, and 6, on scientific presentation and publishing, are quite useful. Chapter 3, on talks and posters, contains much of the advice that mentors should give to young scientists but sometimes don’t, as evidenced by the poor talks and posters

one can see at any meeting. Also covered in the chapter are suggestions on how to plan different types of talks for different audiences; how much detail to include (less than you think); how to make good visual aids, speak clearly, and point to the screen effectively; and how to respond to questions at the end of the talk. A section within the chapter discusses how to produce a visually appealing and informative poster. Any inexperienced scientist—and many experienced ones!—could benefit by carefully studying and applying the principles outlined in the section. Chapter 5, on writing a good paper, includes a complete set of guidelines for organizing the paper, writing clearly, and preparing good figures, tables, and reference lists. Chapter 6 covers electronic publishing, including its benefits, problems, and future. The pages of all three chapters could easily become dog-eared if placed in an office occupied by graduate students and postdocs.

The seventh and final chapter concerns the patent process and succinctly describes what may or may not be patented and how the process works in Europe and the US. The main advice running throughout the chapter is “hire a good patent attorney,” which is no doubt wise.

Chapter 4, on the culture and ethics of scientific publishing, is somewhat unusual for such a book. Its contents are rarely discussed in research groups, perhaps because mentors assume the implications of publishing and ethical dilemmas and behavior are more obvious to young scientists than is truly the case. The first part of the chapter is a brief description of the different purposes of various kinds of scientific publications—general science journals like *Nature*, specialist journals, multiauthored books, monographs, preprints, conference proceedings, and so forth—coupled with discussions on why and when to publish. The second part, on ethics, includes an explication of the American Physical Society’s “Guidelines for Professional Conduct” and a summary of several cases of scientific fraud, most notably that of Jan Hendrik Schön. Although the coverage is brief, including

the culture and ethics of publishing is valuable because those are issues that young scientists are unlikely to ask their elders about.

Chapter 2, on scientific creativity, is unfortunately the least successful. One hopes that most students will receive guidance from their mentors on how to write a

good paper, give a good talk, or produce a good patent application. However, how to become a creative scientist is much more of a mystery, even to those who have accomplished the feat. The authors discuss various “prerequisites for creative work,” including diligence, curiosity, and an understanding of the foundations of the field. To foster creativity, they suggest that one work at a time of day and in a place that promotes concentration, with good lighting and fresh air; eat a healthy diet; and exercise. Readers cannot take exception to their advice, but most young scientists will already have heard it from their mothers. Discussions on the kinds of intelligence typically displayed by younger and older scientists, and statistics about regional differences in scientific output, complete the chapter but do nothing to guide readers.

Make Your Mark in Science largely succeeds at its intent, which is to give good advice on basic skills necessary for a successful scientific career. It is marred by mostly irrelevant illustrations, some of which are meant to be more humorous than they actually are, and by sloppy editing. For example, the lead journal of the American Physical Society is not titled *Physics Review Letters*. Yet such slips do not detract significantly from the book’s usefulness. A good mentor might consider putting a copy in a room where graduate students and postdocs socialize or work. For students who have a negligent mentor, the book will be even more valuable.

Laurie E. McNeil

University of North Carolina
Chapel Hill

A World Without Time: The Forgotten Legacy of Gödel and Einstein

Palle Yourgrau

Basic Books, New York, 2005.

\$24.00 (210 pp.).

ISBN 0-465-09293-4

During the World Year of Physics 2005, hundreds of authors couldn’t resist using the golden recipe “Albert Einstein and X” to publish yet another book on their pet subject of X. Unfortunately, Palle Yourgrau, a philosopher at Brandeis University in Waltham, Massachusetts, and an acknowledged expert on Kurt Gödel, is no exception with his *A World Without Time: The Forgotten Legacy of Gödel and Einstein*.

