

Once the premier spacefaring nation in Asia, Japan is now left in China's shadow. However, the future still holds much promise, including missions to Mercury and the moons of Mars, and the long-term prospect of Japanese astronauts setting foot on the Moon and driving roving vehicles across its surface. — PETER BOND.

**How to Write and Publish a Scientific Paper, 9th Edition**, by Barbara Gastel & Robert A. Day (Cambridge University Press), 2024. Pp. 348, 23 × 15 cm. Price £27.99/\$34.99 (paperback; ISBN 978 1 009 47753 6).

If you are an established professional scientist, you probably think you already know how to write a scientific paper, and of course that's essentially true. But a quick glance at this book might be enough to tell you that you still have things to learn. For first-time paper writers, it will be very useful indeed. This is the ninth edition, which argues that people do find it helps them.

When I looked at the list of contents, I was not surprised. Every conceivable topic is covered, together with quite a few that I would not have thought of. There are eight main sections: 'Preliminaries' (including such basic topics as What is Scientific Writing? and What is a Scientific Paper?); 'Preparing the Text', with subsections on all the necessary parts from Title to References; 'Preparing the Tables and Figures'; 'Publishing the Paper', starting with an explanation of Copyright; 'Doing Other Writing for Publication'; 'Conference Communications'; 'Scientific Style' (including Use and Misuse of English); and 'Other Topics in Scientific Communication', including How to Write a Thesis and How to Work with the Media. There are four useful Appendices (including Words and Expressions to Avoid, with two columns: Jargon and Preferred Usage; we would all benefit from looking at that one).

The text is clearly and logically written, so the book is a pleasure to read. It is lightened from time to time by relevant cartoons, including two from Peanuts. There is a pertinent quotation at the head of each of the 42 sections (*e.g.*, "Manuscripts containing innumerable references are more likely a sign of insecurity than a mark of scholarship", attributed to William C. Roberts). There is a glossary, a list of References, and an Index. A very useful reference book for all scientists who want to have their work read — and that's all of us, isn't it? — ROBERT CONNOR SMITH.

**Pisgah Astronomical Research Institute: an untold history of spacemen & spies**, by Craig Gralley (History Press), 2023. Pp. 158, 22 × 14 cm. Price \$23.99 (about £19) (hardbound; ISBN 978 1 4671 5218 1).

PARI, the Pisgah Astronomical Research Institute, was founded in 1998 by Don Cline and his late wife, Jo. It now focusses on both live and remote astronomical education and also houses many collections of astronomical glass plates, deaccessioned by Harvard and many other observatories. But the site started life as a NASA tracking station (1963–1981) and next was owned and operated by the US National Security Agency (1981–1995). The author is a former senior executive of the US Central Intelligence Agency. The above is meant to be an 'other books received' summary.

A review would continue: It isn't often that a book, especially a history book, hits one's mailbox just in time to provide a slice of information needed for the next day's teaching. But this one did. In its tracking-station days, the two 85-foot-diameter radio dishes could pick up the signal from a 5-Watt source on a satellite 200 000 miles away. How much is that in janskys? Well, for some