## **Book reviews**

## **Communicating Science: A Practical Guide for Engineers and Physical Scientists**

Raymond Boxman and Edith Boxman. World Scientific Publishing. 2017, 276 pages



The book under review is indeed a guide, and a practical one too, but it is not only for engineers and physical scientists—it is useful to all those who communicate technical information or need to and want to do the job well. The core audience is indeed researchers: an entire chapter is devoted to submitting a paper and the reviewing process, and seven more deal with different genres of research writing, one each for research reports (including papers and theses), conference presentations (including lectures and posters), proposals, business plans, patents, articles for the mass media, and email messages, letters, etc. (including job applications and CVs and résumés). These eight chapters are preceded by an introduction and followed by a detailed chapter, titled 'Writing well: organization, grammar and style'.

That the book is written 'from the trenches' is evident from the lively and engaging preface, which explains how the book came to be written. In 1997, Dr Raymond Boxman was asked by the then Dean of the Faculty of Engineering, Tel Aviv University, to offer a course for doctoral students, who, following a change in regulations, were required to write their theses in English. Dr Boxman conducted the course for 16 years and also conducted similar courses at more than half a dozen universities the world over—the book is the richer for that experience, and even more so, because Edith Boxman has been a banker and an economist, and must have brought to bear on the book's approach and contents her different perspective. This practical experience is evident throughout the book and in many examples. In fact, whereas many other books on writing confine themselves to one or two examples, *Communicating Science* abounds with them, which help readers not only in understanding the concept or the advice being offered but also in reinforcing and assimilating it. Many of the examples are drawn from biology as well, one more reason why I think the second half of the subtitle does the book injustice.

Yet another pointer to the book's origin is the firm tone and the precision of its instructions. Here is one on phrasing research questions: 'The **Research Question** (**RQ**) [*emphasis retained*] is the objective of the research, expressed as a one sentence question. The RQ must demand an answer, be a grammatical question, and end with "?". In a similar vein, those attending conferences are advised thus: 'While queuing for registration, refreshments, etc., introduce yourself to your neighbours and learn about their work.' 'Avoid hanging around with colleagues from your own institution or region . . . use the opportunity to meet new colleagues from distant locations.'

The examples throughout the book also serve as a phrase bank. The set of five tables, each listing commonly used verbs, is a good example. Each table corresponds to one section of the commonly found IMRaD structure – introduction, materials and methods, results, and discussion – and one for indicating future line of work, and does a good job of pointing out appropriate tenses and the choice between the active and the passive voice for each section. These tables are part of the last chapter, on writing. Although long (nearly 80 pages), it is a useful compendium.

By way of minor quibbles, I should mention two: (1) the lack of more recent sources in the *For further reading* section that appears at the end of some chapters: for a book published in 2017, I found (with two exceptions) none more recent than 2013 and also noted a reference to the *15th* edition of the *Chicago Manual of Style* (2003) and (2) the sketchy treatment of citations and references.

The authors set out to write 'a short text that emphasizes the connection between scientific thinking and writing . . . that every Ph.D. student would want to read before writing his or her thesis . . . a resource to which researchers would return as they advanced in their careers.' To my mind, the book achieves the objectives: every Ph.D. student may not want to read the book, but should—and will not regret it.

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