

Every Molecule Tells a Story

All that is transitory is but a metaphor, wrote Goethe in *Faust*. This is also true for molecules, and their metaphorical nature is thus necessarily linked to a story, or to many stories.

This story can be a spectrum that “talks” to the observer, but also a book like this one, which describes the currently highly popular works on all sorts of substances: stories about molecules. There are always two requirements for a story-telling: the story-teller and the listener. The story-teller must be able to tell a tale well and richly, and the listener must be affected by the story and be taken along by it.

But first to the story-teller. Apart from his area of research (organometallic chemistry in the broadest sense; a topic about which he has also written five monographs), Simon Cotton was a chemistry teacher for decades at private and non-private schools in England. Furthermore, he has written contributions for the general public (“Soundbite Molecules”, “Molecules of the Month”) that have found audiences worldwide via the internet. The difficulties of “public science” are thus well-known to him, and it can be presumed that this book arose from his previous experiences.

At first glance, the individual molecule stories are well-chosen in particular for the reader without any chemistry background, as a small selection of the chapter headings illustrates: Starting with chapters on the atmosphere and water, then on to acids and bases, to the things that make chemistry attractive to the layman: natural and synthetic poisons, explosives, drugs, and sex (in the chapter on steroids)—our whole existence. Household products are also well-featured: pharmaceuticals (those natural and created by chemists) and their effects, synthetic polymers, and so on. The choice of material is naturally up to the author, but he can perhaps be accused of leaving some topics untouched: interesting topics such as chemistry and sport (apart from doping, which is treated knowledgeably in the section on steroids, but what would skiing for example be without chemistry?), or chemistry and informatics. The scope that chemistry has in everyday life is however unending and multifarious, and a book has to end somewhere.

The style of the book encompasses perfectly English science prose: succinct, clear, and spiced with British humor again and again.

But from a reader’s point of view: Who is the book written for? And who would wish to read it?

At this point I must admit to two small points of criticism: First, the book does not do enough to reach an international audience. Many of the no doubt interesting examples of the effect of particular substances arise from everyday British life and cannot always be followed by an international readership. Second, although the book has an excellent and up-to-date list of references (32 pages!), many good sources of information have not been tapped. This is especially the case for contributions in *Chemie in unserer Zeit*, which shines again and again with outstanding tales of substances. (Put another way: The fact that these contributions are not cited lies to a considerable degree therein in that there is no “International Edition” of *Chemie in unserer Zeit*.)

My main criticism is drawn to the concentrated nature of the book. The book gives the reader no opportunity to just jump over a couple of sections. Every sentence counts, and each and every one is crammed full of information. This leads to the book having the feel of a work of reference; chemists like to read such a book, to refresh the memory of something that has been forgotten. But I fear that a layman would regrettably quickly put the book down again.

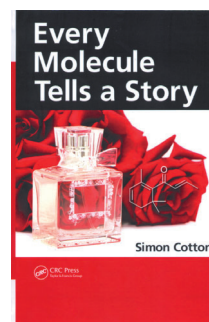
It is once again the time-old problem of depth and breadth. I would have liked the book to be less rich in molecules and instead have more detail in single cases, and in particular regarding the people behind the compounds that are presented. The “human-interest” aspect (scientists are after all not only matter-of-fact people) was touched upon too briefly, but this is just what grabs the reader; only then will they pass on the story.

The author initially wanted to dedicate this book to the internet, and without the internet the text would no doubt not have come about. This form of acquiring information is apparent in the book again and again, and the molecule stories often come across “cold”.

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