

Biographical Encyclopedia of Astronomers, 2nd Edition, edited by T. Hockey *et al.* (Springer, Heidelberg), 2014. Pp. 2434 (in 4 volumes), 25 × 16.5 cm. Price £773.50/\$1200 (hardbound; ISBN 978 1 4419 9916 0).

One's understanding of the physical Universe along with all the subtleties involved is never complete without the knowledge of the countless endeavours by the brightest minds in human history at achieving them. Standing on the shoulders of giants is not just taking an idea and advancing on where somebody left off but is to also to comprehend the path that led to such accomplishments. That understanding is not only a lesson in scientific evolution and discovery but is also a life lesson of the endeavour by those great minds and a great legacy of what makes us proud in calling ourselves human beings.

The *Biographical Encyclopedia of Astronomers* four-volume series gives a quick, yet comprehensive, biography of astronomers from the most influential figures such as Kepler and Hubble to the least remembered scholars that we might never have heard of had it not been for this series, and it spans a very wide range in historical time from antiquity to the modern era. The descriptions are very readable and easy to follow. One very appealing feature is the connections given in each biographical entry to scholars that have influenced in any way the character under discussion. They range from tutors to students to influential characters in generations earlier or later. This makes it very straightforward to pick up an argument and follow it through its historic course, and is what makes these books a very valuable resource on the history of astronomy, complemented by the wealth of references given at the end of each entry. Thus, the *Encyclopedia* is not only a tale of the scholar's life but is also a very thorough introduction to the most important astronomical achievements throughout history. The level of information provided is just about right to get the reader started off with his/her own research.

One very interesting aspect is that it does not confine itself to pure astronomers and in fact explores the biographies of a diverse range of characters who made contributions to the field of astronomy, from poets and artists to philosophers and thinkers. In that sense it is really a biographical work that goes beyond the scope of astronomy and could be used as a general reference of scientific biography. The books are alphabetical in order and a careful attempt has been made to link different name aliases for scholars with each other.

The international nature of this work is quite astonishing. The authors have done an excellent job in collecting a comprehensive biography from different parts of the world that otherwise would have been very complicated to locate by just searching into modern western articles. By looking at these volumes

one would be amazed at how ancient the science of astronomy is, and I was astonished to find the very international nature of astronomical sciences. One shortcoming, perhaps, was the lack of detailed information on some individuals and the balance was not always preserved in the amount of text used for different astronomers of different status; however, the volume limitations and the perhaps less-understood life stories of some of those scholars justify the imbalances.

Overall, I very much enjoyed reading the books and I believe that a biographical work perhaps could not have been done any better. By using these books as a reference one not only learns about the history of astronomy and science but it is a very good reminder of who we are and how we got here; as Werner Heisenberg once put it: "If I were asked what was Christopher