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BIBLIOGRAPHY OF SECONDARY SOURCES ON THE
PERIODIC SYSTEM OF THE CHEMICAL ELEMENTS

One of the consequences of the renewed interest in philosophical aspects of chemistry has been the corresponding renewed interest in the periodic system of the elements which embodies so much chemical knowledge in an implicit form. We have therefore decided to further promote scholarship on the periodic system by compiling a bibliography of previously published material. As the title of this article implies, we restrict ourselves to secondary sources. Readers interested in primary material can consult a number of useful references for this purpose. These include the classical treatment on the History of the periodic system by van Spronsen as well as Mazurs's compilation of over 700 forms of the periodic system. Mazurs also includes a detailed bibliography of articles and books in several different languages. Additional sources of primary articles which come to mind include David Knight's *Classics in the History of Chemistry*, Carmen Giunta's web pages for the history of chemistry and entries under individual scientists in the *Dictionary of Scientific Biography*.

Turning to the present compilation we do not claim this to be a comprehensive list, since it partly reflects the interests of the senior author (E.R.S.), namely the relationship between the periodic system and quantum mechanics. For example, in addition to articles specifically on the periodic system we include a number of articles which deal with the related themes of electronic configurations of the elements. This bias also explains the disproportionate number of references to the work of the senior author. We have tried to include as many as possible of the articles on the periodic system which have appeared in the philosophy of science literature. These include Bensaude, Christie, Hettema and Kuipers, Kultgen, Lipton, Maher, Scerri, Shapere and Sundaram, among others.¹



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For many years, when philosophy of chemistry did not have its own journals, that role was partly filled by the *Journal of Chemical Education*. The single biggest source of material, by far, for the present compilation is this same journal, which has been published continuously since 1922 and is available in most academic libraries. Again we do not attempt to include all such references to articles which have appeared in this journal but we have concentrated on articles of a more fundamental nature.² Fortunately the journal possesses an excellent search engine which readers may use to obtain complete lists if this should be of interest. This is best achieved by searching under titles such as periodic table, periodic system and even element, although the reader should be warned that a search on the latter category reveals a total of 427 entries at the time of writing.

No doubt we have made some serious omissions and we therefore welcome suggestions, should we undertake a future update of this list.

NOTES

1. See below for references to all these articles.
2. We also omit references to articles on the synthesis of the superheavy elements apart from a few key examples by Glen Seaborg and Darlene Hoffman.

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