Ashraf M. A., Sarfraz M., Naureen R., Gharibreza M. | Environmental impacts of metallic elements: speciation, bioavailability and remediation

Alfred V. Hirner¹

© Springer-Verlag Berlin Heidelberg 2016

**2015 | Springer | 434 pp, 146 illus. | Hardcover
ISBN 978-981-287-292-0 EUR 99,99, GBP 90.00**

The book *Environmental Impacts of Metallic Elements: Speciation, Bioavailability and Remediation* clearly targets a general topic for the interested geoscientist/environmentalist. However, on closer inspection there appear in the book specific field studies in the metallogenic belt of Malaysia—for this reason, it's mainly an activity report of the four Southeastern Asian authors (see p. 5 and chapters 13–14). Thus, this book is far from covering the given subject outlined in its title. The aspect of speciation is only dealt with in part II of the book that concentrates on analytical metal speciation. Also in this second part, the organometallic section is really not state of the art and the relevant most important process of biomethylation does not even receive attention in a subchapter, whereas tin accumulation by *Cyperus* species is allocated to a separate subchapter.

Altogether this book captures a narrow range of studies. Mostly general statements given are not precise enough to explain and describe specific real scenarios, and moreover, the scenarios described do not cover the multitude of significant geological/environmental situations found in the real world.

The organization of ideas, methods, global/local scales, logical structures, science and routine, as well as specific situations and general background information could have been considerably improved and structured in order to prevent the prevailing confusion and to help the interested reader gain and deepen practical as well as scientific knowledge.

✉ Alfred V. Hirner
alfred.hirner@uni-due.de

¹ Environmental Analytical Chemistry, University of
Duisburg-Essen, 45117 Essen, Germany