

BOOK REVIEW

Volume **34** of the series **METAL IONS IN BIOLOGICAL SYSTEMS: "Mercury and its Effects on Environment and Biology"**, ed. Astrid Sigel and Helmut Sigel (648 pages, \$ 250.00, Marcel Dekker)

Volume **34** of the series **METAL IONS IN BIOLOGICAL SYSTEMS**, entitled **"Mercury and its Effects on Environment and Biology"**, covers many up-to date multidisciplinary research lines in this area.

Speciation of Hg(II) and CH₃Hg(II) compounds and its applications to the determination of mercury in lakes, rivers and marine environment, including boreal surface waters, are the topics of chapters 1 to 4.

Mercury pollution in soil, including the biogeochemistry of Hg in the air-soil-plant system, as well as its bioaccumulation in the food chain, are covered by the six next chapters.

Physiology, toxicology, metabolism and transport of mercury are discussed in chapters 11 to 13.

The last six chapters deal with the effects of Hg on the immune system, the impact of this metal released from dental "silver" fittings on antibiotic resistance, the inhibition of brain tubulin-GTP interactions by mercury, the reaction of Hg(II) with nucleic acids and the use of 2D ¹H{¹⁹⁹Hg} HMQC NMR, Hg-responsive gene regulation and bacterial Hg-resistance, several research lines that were initiated only quite recently and that are clearly aimed to stimulate future work in this area.

This book gives an excellent up-to-date coverage of the field and will be very useful to people working in this area of research.