related the chemical composition and mutagenicity of substances present to markers of genetic toxicity in biological samples from workers.

In summarizing the proceedings, Hogstedt expresses optimism that biological monitoring methods can be effective in preventing environmental cancer and other serious diseases. He cites the story of ethylene oxide as an illustration. In 1959–60, Ehrenberg and Gustafsson warned, on the basis of its mutagenicity and the finding of chromosomal aberrations in accidentally exposed workers, that ethylene oxide posed a cancer hazard. Ten years later, Hogstedt found excesses of leukemia and stomach cancer in the worker cohort originally studied. Here, biomonitoring data from well-conducted studies were able to provide valuable early warning of carcinogenic hazards.

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Coastal Trees

The Botany of Mangroves. P. B. TOMLINSON. Cambridge University Press, New York, 1986. xii, 413 pp., illus. $69.50. Cambridge Tropical Biology Series.

Mangroves are diverse and important components of tropical ecosystems in coastal areas. In addition to being able to exist in, or survive inundation by, seawater, they feature unique characteristics like vivipary, aerial or stilt roots, pneumatophores, knee roots, salt excretion, and plank roots. Indigenous people use them for firewood and timber and also benefit nutritionally by the increased fish and shellfish productivity afforded by the mangal communities. Nonindigenous people find them fascinating for bird watching and ecology field trips. The literature on mangroves is voluminous, and Tomlinson has done a great service by synthesizing the massive amount of information available into a concise, well-illustrated, and, with some lapses, very readable book. The author states that the book is designed for the beginning student or nonspecialist, but unfortunately he tends to use specialized terminology without definition.

The first section of the book provides an overview of the mangrove ecosystem and the biology of the individual plant species that constitute it. It includes an integrated discussion of ecology, floristics, biogeography, anatomy, morphology, and physiology. The author indicates that many ecologists have difficulty accepting the fact that on a given site *Rhizophora* may be the most seaward species while on an adjacent site *Avicennia* or *Sonneratia* may be the most seaward. They tend to see mangroves as a successional stage leading to some climax terrestrial community; however, Tomlinson notes that some mangal communities have been documented to exist as such for as much as 2000 years. The advent of climax may parallel that of the many paradisaical mythologies prevalent in the wider cultural milieu.

The second and largest part of the book (p. 173ff) is a systematic survey of mangrove plants and associates by family. The information it gives is much broader than that given in most systematic works because, in addition to habitat and ecology, salient morphological, physiological, and developmental features are included. Many of the figures are original, and there is no doubt that this volume will be used and valued for many years.

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Some Other Books of Interest

Applications of Social Science to Clinical Medicine and Health Policy. LINDA H. AIKEN and DAVID MECHANIC, Eds. Rutgers University Press, New Brunswick, NJ, 1986. xii, 588 pp., illus. $35; paper, $14.95.

In compiling this volume produced under the auspices of the Medical Sociology Section of the American Sociological Association the editors were motivated by the belief that the contributions of the social sciences to clinical medicine and health policy are insufficiently appreciated by medical educators and practitioners and government policy makers. "By examining where we have been, the progress we have made, and the gaps in our knowledge that continue to exist," they write, "we hope this book can help set the stage for enhanced contributions in coming decades." The volume opens with a group of papers addressing broader issues relevant to medical care: effects of science and technology (Fox), social class differences (Dutton), the state of the medical profession (Freidson), the role of the hospital (Stevens), the health care system generally (Altman), and the role of research in policy formulation (Davis). The second section of the book contains reviews of epidemiological and other knowledge of cardiovascular disease, cancer, and mental illness and discussions of the assessment of health status and "social experiments" (randomized clinical trials) in health. Part 3 deals with issues specific to particular stages of the life cycle—the social management of reproduction, infant mortality, teenage childbearing, and problems of old age. Part 4, under the heading Prevention and Caring, discusses psychosocial and behavioral risk factors, the healthfulness of the work environment, the functions of social support, patient-practitioner relationships, and medical error. A final section, devoted to the organization and delivery of health services, includes discussions of payment systems, economic factors affecting clinical practice, cost containment, and ethical issues.—K.L.

Evolution and Creation. ERNAN MCMULLIN, Ed. University of Notre Dame Press, Notre Dame, IN, 1986. xvi, 307 pp. $24.95. University of Notre Dame Studies in the Philosophy of Religion, no. 4. From a conference, Notre Dame, March 1983.

Science and Creation. Geological, Theological, and Educational Perspectives. ROBERT W. HANSON, Ed. Macmillan, New York, and Collier Macmillan, London, 1986. xiv, 224 pp., illus. $24.95; to AAAS members, $19.95. AAAS Issues in Science and Technology Series. Based on a symposium, Washington, DC, Jan. 1982.

In response to efforts to require that creationist views be represented in school curricula, a number of scientists have provided expositions for the layperson of the scientific rationale for evolution. (A group of such books was reviewed in *Science* **220**, 851 [1983].) The present volumes bring together critical commentary on creationism from other perspectives.

Evolution and Creation stems from a conference that "was inspired by the conviction that [the] opposing of evolution to creation betrays a fundamental misunderstanding of one or both concepts." Most of the 12 contributors to the book are theologians or philosophers. Rather than focusing on particular claims of the current creationism movement, as have most other recent books on the subject, they are concerned with ideas of evolution and creation from a broader perspective, examining them in the light of scientific, philosophical, and theological ideas and their historical development.

Science and Creation is a collection of 11 papers derived from sessions of the 1982 AAAS meeting that includes among its contributors historians, theologians, specialists in science education, and a sociologist. It is distinguished from other volumes on the subject principally by the attention it gives to practical measures by which the problems presented by creationism have been addressed. It includes, for example, reports on