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EDITORIAL NOTES

Introduction

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As a formal discipline, medical geology—the study of the impacts of geologic materials and geologic processes on animal and human health—is relatively new. Humans, however, have been cognizant of these impacts for millennia. Some of these problems, such as high levels of arsenic in drinking water and inhalation of natural dust, affect many millions of people around the world and have received front-page newspaper coverage. In recent decades geoscientists and biomedical/public health scientists have built up a respectable archive of published papers that would fall under the umbrella of medical geology. The broad diversity of backgrounds of the scientists involved in medical geology research has resulted in papers being published in a multitude of journals in many different disciplines. Moreover, because medical geology problems are most prevalent in developing countries where the populations are more readily exposed to the natural environment, important papers have appeared in many different languages.

There is a need for a common outlet for medical geology publications to facilitate communications among different disciplines and different countries. It is with this objective in mind that we agreed to produce two special issues for the readers of *Environmental Geochemistry and Health*. With this and a subsequent issue we have attempted to bring together a series of papers dealing with some of the more important medical geology issues, with emphasis on their impacts on developing countries. In the first paper in this volume, Fordyce and co-authors describe a geographic information system (GIS) used to aid in the identification of areas where high-fluoride waters and fluorosis may be a problem in central Europe. Figueiredo et al. look at one of the most pervasive medical geology problems—arsenic in the environment. They describe integrated studies of three regions in Brazil and explain why arsenic-related health problems are absent. Dogan and Dogan continue the theme of arsenic in the environment. They describe a geological and mineralogical study to find the sources of arsenic in the Kutahya region of western Anatolia, Turkey, that have caused arsenic-associated skin disorders. The paper by Dissanayake and Chandrajith describes the effects of geology on the health of people in Sri Lanka and neighboring countries. The health problems of the region

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include dental fluorosis, iodine deficiency disorders, and selenium-based diseases. Rapant and Krčmová describe an important new public health tool linking geochemical maps and epidemiological data in an example from Slovakia. Segovia and colleagues describe radon determinations in soil, groundwater, and air, both indoors and outdoors in Mexico. Millions of people in southern China suffer from dental and skeletal fluorosis resulting from indoor coal combustion. Zheng co-workers discuss a new theory on the principal source of the fluorine. The potential health impacts of dust are discussed in the final paper of this issue. Abimbola and others describe the distribution of high levels of heavy metals in the soils near a cement factory in Nigeria.