

Editorial

The increasing recognition of the need for environmental data from the tropics in order to understand global biogeochemical cycles is a welcome opportunity for biogeochemists. Examples are many: the terrestrial carbon transported by tropical rivers and emitted to the atmosphere due to deforestation of tropical rainforests are pressing biogeochemists to review their estimates on the global carbon cycle and triggering large multi-disciplinary and multinational research programs such as CAMREX and AMASEDS in key tropical regions such as the Amazon Basin. Research on the role played by tropical coastal ecosystems in the accumulation, modification, and transfer to the oceans of terrestrial materials is expanding greatly, as indicated by several papers in this issue. This research focus is also leading to the formation of new institutions devoted to tropical research, such as the new Institute for Tropical Marine Research in Bremenhaven, Germany. Also the traditional UNESCO-UNEP programs in the Caribbean and Asia and the new inter-institutional cooperative projects under the Commission for the European Communities program are facilitating joint research between scientists of tropical countries and their European colleagues.

Environmental contamination problems, such as heavy metals and acid rain, which are being controlled to at least some extent in Europe and North America, are becoming more serious in most tropical countries as a result of accelerated, unplanned industrial growth. The mercury contamination of Amazon fluvial systems discussed in one paper in this issue is but one such problem. High quality research on these problems increases, but transfer of understanding to authorities in most tropical countries lags.

Biogeochemistry as a multidisciplinary science dealing 'with the biotic controls on the chemistry of the environment and with the geochemical control of the structure and function of ecosystems' is a key discipline for focusing environmental research in the tropics, and it is natural that *Biogeochemistry* be involved in presenting tropical research. This special issue contains papers presented at the 23rd International Geochemical Exploration Symposium, held in Rio de Janeiro in October 1989, where a special section on 'Biogeochemistry in the Humid Tropics' was held. Unfortunately, only a small portion of the diversity of biogeochemical subjects has been covered. In fact, the scarcity of original research in the field and the scattered manner in which data from tropical ecosystems are published in many different scientific journals were other important

reasons for this special issue of *Biogeochemistry*. We hope this issue will generate further interest in tropical studies, helping to lead to the testing of general biogeochemical paradigms in the tropics and providing important advances in our understanding of global biogeochemistry.

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