

## Editor's Page

Our lead-off paper this issue is an exceptional contribution by a student, David Slessor of Queen's University. We have been encouraging this type of work and are indeed pleased to publish this exemplary effort. Along with this work on modern foraminiferal ecology are the contributions of K. Hooper of Carleton University, G. Vilks of the Bedford Institute and C.F. Stehman of Dalhousie University. In another field, W.R. Costello of the Massachusetts Institute of Technology, has brought to light some interesting documentation on fluvial processes, while N.R. O'Brien of State University of New York, Potsdam, has given us another excellent look at clay mineralogy through the eyes of both the transmission and scanning electron microscopes. Finally a submission on the cruise of CSS HUDSON after the completion of her 11-month long journey around both North and South America. This voyage was historic in that it was the first circumnavigation of the Americas. It was organized by the Atlantic Oceanographic Laboratory, Dartmouth, Nova Scotia, and its programs involved more than 100 scientists. In this issue we are reporting on Phase VIII of the HUDSON 70 cruise, and refer to it as the Arctic Voyage. It commenced at Victoria, British Columbia and entered the Beaufort Sea via Bering Strait. The results of her multidisciplinary program in the Beaufort Sea are given together with a summary of her completion of a west-east sailing of the famous Northwest Passage.

Although we have not dwelt heavily on book reviews in the past, three new contributions came to our notice which are worthy of consideration with regard to the training of students, and as manuals for the professional. We personally pored over Coastal Environments and were immensely rewarded by an enjoyable and edifying presentation. Our colleague Gerard Middleton of McMaster University sent us a tempting description of a new text to appear in German, and the third book dealing with sediment analyses is included as it pertains to the subject interest of our readership. From time to time, we shall present these items as they appear.

We have noticed in the United Kingdom how several government agencies have been grouped under a single head to deal with the environment. In the United States this has recently been consummated with the formation of NOAA - the National Oceanic and Atmospheric Administration of the U.S. Department of Commerce. Now it is time for Canada to follow suit, so that a new department on environmental management and renewable resources is making its debut. This agency will encompass such units of government dealing with meteorology, inland waters, oceanography, fisheries, hydrography and others. A parallel development is transpiring in the universities. Schools of environmental sciences are emerging together with a conglomerate of disciplines in vastly expanded scientific departments. The academic impetus is from the multidisciplinary approach to science the modern student must take. The cruise of HUDSON 70 is an example in point. Although the old vertical structures may be coming down at the graduate and professional levels, we do not foresee a re-structuring of the undergraduate curriculum in the immediate future. Perhaps when university takes on the aspects of a supermarket, and students buy their courses in conformance with the demands of his future employer, this may come about. For the present though we continue to observe the mandatory expanded interests of the graduated science student, and this conforms with trends now being set at national governmental levels.

Another important contribution deals with the underwater Habitat presently under the programming of the engineering department of Memorial University, St. John's, Newfoundland. These structures are providing immediate and prolonged access to the underwater environment for the purpose of disciplined studies such as engineering, geology, biology and other marine fields. Although this installation is linked directly to a shore station nearby, it is foreseeable that such vessels will be anchored further offshore and in deeper water. Their size and capabilities will also be altered and, in general, a greater diversity of effort will emerge with succeeding generations of Habitats. Closely linked with these experiments are those performed by divers working from lock-out hatches in the present class of research submersibles. The divers are actually leading the way and are fetching both the lock-out submersible and Habitat, to greater depths. Also in company with these technological advances is a new fleet of so-called bottom crawlers. These are the heavy duty submersibles which will undertake operations such as dredging, ploughing, drilling, salvaging and general removal operations. An assist can be made to the problems of mining the sea bottom, drilling for oil and in particular the proposition of well-head completion, ranching the seas for food, cultivating the seas for minerals, and carrying out general surveying and resources operations. Several organizations are well advanced in these technologies and we have included the study on Habitat in MARITIME SEDIMENTS because of the obvious applications to the study of sedimentation and geology, in general, this vessel and its sea-going cousins will produce. This incidentally is another example of the multidisciplinary direction our sciences are taking, and many of us must move along in this new vanguard of technology.