

## Hither and Yon

From southwestern Ontario we received the following kernels on movements of university staff. Dr. Bruce Liberty has moved from Guelph to join the staff of the Department of Geological Sciences, Brock University, St. Catharines, Ontario. Dr. Jan Terasme, formerly of the Geological Survey of Canada became chairman of the geology department at Brock on July 1, 1969. Also in this department Drs. R. T. Bell and A. Lissey assumed duties as assistant professors in the fall of 1969. Dr. Bell is lecturing in sedimentology and structural geology, and Dr. Lissey is lecturing in ground water and hydrology. Dr. Con Gravenor has returned to Ontario from the Alberta Research Council. He is doing part-time lecturing at the University of Windsor's Department of Geology. The Soils Department of the University of Guelph has hired Drs. P. Martini and M. Brookfield to teach sedimentology and stratigraphy respectively. Dr. Ted Appleyard is Acting Chairman of the Department of Earth Science at the University of Waterloo and Dr. J. R. Beerbower has left the Department of Geology at McMaster University, Hamilton and is presently heading up the geology department at Binghamton State University of New York at Binghamton.

From the Woods Hole Oceanographic Institution, Dr. David Ross reports that they hope to be using the research submersible ALVIN again after her long "winter storage" of 10 months at 5,000 feet in the Atlantic Ocean. He and his colleague Dr. Egon T. Degens recently published a symposium volume on the hot brine area of the Red Sea. Ross hopes to be returning to the Red Sea in November of 1970. Recently he returned from a highly successful six-week cruise to the Black Sea, and collected more than 60 sediment cores and 5000 km of seismic profiler records. Colleagues from Germany, Italy, Sweden, Great Britain, Turkey, and Russia joined the expedition, and in turn the cruise paid a four-day visit to Russia.

The Halifax Geotechnical Group has announced its program for the next few months. On January 19, 1970, Mr. John Jones of the Engineering and Ground Water Section of the Nova Scotia Department of Mines will give a talk on the work of the Section, including current research in Nova Scotia. On February 16, 1970, a general meeting will be held to inform members of the proposals to form a Canadian Geotechnical Society. A short report on the proceedings of the recent 22nd. Canadian Soil Mechanics Conference will also be presented. In March of 1970, Dr. Elio D'Appolonia of Pittsburgh, a noted consultant in soil mechanics and foundations, will be the touring lecturer sponsored by the Associate Committee on Geotechnical Research, National Research Council of Canada, for the spring tour.

Locally we were happy to see the return of Dr. Fab Aumento who is on an Isaac Killam Fellowship at Dalhousie University, where he is engaged in fission-track studies. Dr. Douglas Loring of the Marine Ecology Laboratory, Bedford Institute, has recently returned from the Netherlands where he worked with the Regional Soil Science Laboratory, State Agricultural College, for the past year. During his stay at the Laboratory, Dr. Loring worked with Dr. Dick Nota of its Mineralogy and Geology Section on the preparation of a major publication as well as several papers dealing with the marine geology of the Gulf of St. Lawrence. During his stay there he visited a number of laboratories in the Netherlands, and also visited the Institute of Arctic Geology in Leningrad. Also close to home we were sorry to say goodbye to our marine geology colleague of many years at the Bedford Institute, Dr. Grant A. Bartlett, who left to join the staff of the Geology Department at Queen's University, Kingston, Ontario. Grant was one of the first Bedford Institute workers in this field, locally, when he commenced his first program in 1961 off the Scotian Shelf. However, as geologists our paths will cross, and we hope to keep in touch on various programs.

Three very important conferences were held in 1969 by student associations. The Geological Association of University Students of the Atlantic Provinces held its meeting in Fredericton, New Brunswick, the Western Interuniversity Geological Congress was held in Saskatoon, Saskatchewan, and the first Central Canada University Geology Conference was held in Ottawa, Ontario. These may be the seeds of a future national congress.

The Marine Geology Section at the Bedford Institute had a fine opportunity to evaluate the submersible "Shelf Diver" from Miami, Florida. This boat was on charter to B. I. and collaborating on its programming were Fisheries Research Board people at St. Andrews, New Brunswick, and the Bedford Institute. Royal Canadian Navy divers assisted on the sampling

program by carrying out lock-out dives from the after pressure chamber while the submarine was on the bottom. Considerable film was shot with nearly 2000 feet of colour movies and at least 2000 stills, both black and white as well as colour.

C. T. Schafer began the program in the Gulf of St. Lawrence and Northumberland Strait where he used the diver lock-out facility with the Navy divers. He collected undisturbed sedimentary cores from the bottom in order to obtain samples of foraminifera. L. H. King was most fortunate in discovering bedrock on the Scotian Shelf north of Sable Island from an area previously dredged with the aid of B. I. surface vessels. He also made detailed observations on the nature of the bottom and corroborated much of his earlier work. G. Drapeau working in La Have Basin studied an interesting topographic feature at 800 feet below sea level where he noted many benches or ledges. Some of these which occur at much shallower depths may represent old sea levels, perhaps at a time when much of the Scotian Shelf was above water, although not necessarily 800 feet more. B. R. Pelletier joined the Shelf Diver at Digby, N. S. for the final phase of her program in the Bay of Fundy. Here Navy divers assisted in the diver lock-out sampling program. Different sedimentary environments were surveyed, sampled, and photographed. Using this team it was possible to do several times more sampling each day than could be done with a surface vessel alone, with the added advantage of knowing precisely what was sampled, and where.

The program was highly successful overall with 28 of the 41 days at sea devoted to diving with the submersible. All of the B. I. crew including their photographers R. Belanger and N. Fenerty who documented the cruise, send their thanks to the Canadian Coast Guard Ship C. D. HOWE, her master Captain Oullete, and her crew, who handled the submarine 102 times without a single mishap. B. I. expresses its appreciation to the Royal Canadian Navy for supplying divers, particularly in this new venture for the B. I. Laboratories.

#### Canadian Scientific Ship HUDSON Undertakes Major Oceanographic Expedition.

The Canadian Scientific Ship HUDSON is undertaking a major, one-year oceanographic expedition, called HUDSON 70, that will take her 41,000 nautical miles around North and South America. Up to 100 scientists, in all, will study the waters of four oceans: Atlantic, Antarctic, Pacific and Arctic. Object of the expedition is to obtain knowledge of the oceans valuable to the development of the undersea resources of Canada and the world. Route of the expedition is south in the Atlantic Ocean from Canada, around Cape Horn, north through the Pacific Ocean to Alaska, and through the Northwest Passage of Canada's Arctic Archipelago, if ice conditions permit. If completed, the expedition will be the first in history to circumnavigate North and South America and the first of its kind to carry out an oceanographic sampling of the Pacific Ocean from the Antarctic Ocean through to Alaska.

The CSS HUDSON, under Captain D. W. Butler, left Halifax, Canada, on November 19, 1969. One of the most modern vessels of its kind afloat, she is operated from the Bedford Institute at Dartmouth near Halifax by the Atlantic Oceanographic Laboratory of the Department of Energy, Mines and Resources. The HUDSON has a cruising range of 15,000 miles and possesses the sea-keeping and ice-breaking qualities that enable her to work efficiently in both the windswept areas of the southern oceans and the ice-infested waters of Canada's Archipelago. The scientists are mainly from Canadian government laboratories and universities. They are being joined at ports of call by scientists from United States, Argentina and Chile. Their program includes physical oceanography and chemical and biological studies in the South Atlantic, Antarctic and South Pacific Oceans, and geophysical and geological studies of Canada's continental shelf on its west and northern coasts. Ports of call are Rio de Janeiro in Brazil, Mar del Plata in Argentina, Puerto Williams, Punta Arenas and Valparaiso in Chile, Papeete in Tahiti, Vancouver and Victoria on Canada's west coast, and Resolute on Cornwallis Island in the Canadian Archipelago.

The expedition is divided into two phases: the work in the South Atlantic, Antarctic and South Pacific Oceans, and the surveys off the west and north coasts of Canada. From their studies in the South Atlantic, Antarctic and South Pacific Oceans, the scientists expect to gain considerable knowledge of the basic oceanographic processes of the world oceans. Studies in the Chilean fiords will provide a comparison with the British Columbia fiords and basic information on the fiords of the world. The first phase of the expedition is Canada's contribution to the Oceanographic Decade, an international study of the world ocean for the world's benefit in the 10-year period between 1970 and 1980. Extensive geological and geophysical studies will be carried out on Canada's west coast as well as her Arctic continental shelves. The cruise ends October 13 in Halifax.