

Editor's Page

In our final number for Volume 5, we have decided to forego the sections on Current Bibliography, Meetings and Hither and Yon, in order to keep up-dated on current research, but these sections will be contained in the next number. To close our volume we have included a set of papers dealing with regional studies and another set dealing primarily with methodology. The contribution by C. T. Schafer involves estuarine studies along 700 miles of Hudson Bay-James Bay coast line, all carried out in a single season. Another report covering a wide area is that by D. J. P. Swift and colleagues. In this paper the entire Bay of Fundy is treated as a single basin of sedimentation and tidal scouring. A set of companion articles on surficial sediments and Pleistocene history is presented by D. R. Grant in his work on Labrador, Quebec and western Newfoundland. The reader has the rewarding task of relating the comprehensive factual accounts in the text with the thorough presentation of this material in the highly detailed illustrations supplied by the author. Our contributions on methodology are each model studies in themselves. C. V. G. Phipps and L. H. King have shown the inter-relationship of chemistry, mineralogy and sedimentary texture by means of comparative analyses on the same material. D. A. Walker and D. E. Buckley have given exceptional illustrations on uses of the scanning electron microscope and have shown methodological extensions of this instrument in dealing with geological materials. J. F. Cronin has demonstrated a remarkable radiometric technique that can be adapted as a corollary to the studies of various properties in exposed sedimentary bodies.

We have included many items of current research on bedrock occurring on land as such studies are fundamental to an understanding of the geology underlying marine areas. We were most fortunate to receive two abstracts of master's theses and several other contributions from the universities. Another of our sections on current research deals with work in the Arctic. For the sake of completeness we have included many topics exclusive of geology, such as hydrography, acoustics and ice, because operators in this area must become familiar with all aspects of the environment. With the vast petroleum reservoir on the Alaskan north slope and the recent discovery of oil flowing under considerable velocity at Atkinson Point in the Mackenzie Delta, an enormous interest has been generated in all types of research being carried out in the Arctic. More and more, operators are facing the multi-disciplinary approach to modern exploration and development and this is exemplified by the recent voyage of the giant oil tanker, SS MANHATTAN through the Northwest Passage. Survey and research vessels of all descriptions must countenance these problems and the research program of the Polar Continental Shelf Project is a fine example of a co-ordinated attempt to reach a solution to some of them.

Almost paradoxically, with respect to the search for oil, a multi-disciplinary project is underway in Chedabucto Bay, Nova Scotia, which is the scene of the wrecked oil tanker ARROW and the ensuing pollution caused by the escape of Bunker C. oil from its broken cargo tanks. Nearly three million gallons or sixty per cent of her cargo still lies in the sunken stern section. A task force has been organized to deal with clean-up operations, the recovery of the oil in the wreck, and an environmental study of the beaches, water mass and sub-littoral area to determine the effects of the pollution and the ultimate fate of the oil. This work involves every scientific discipline that can be mustered and already nearly 100 scientists have been recruited for the task. Several federal departments such as national defense, transport, fisheries, and energy, mines and resources have all been called into assisting on the program. Local laboratories have given unstintingly of their services and these institutes include the universities as well as provincial and federal agencies. The private sector is also aiding and some help has arrived from the United States. Although the cause of this exercise is regrettable, the instant task force under Dr. Patrick McTaggart-Cowan, Director of the Science Council of Canada called Project Oil, is truly a unique and amazing example of the rapidity with which such a widely diverse operation can be organized and put in motion. All scientific programs are co-ordinated by Dr. Wm. L. Ford, Director of the Atlantic Oceanographic Laboratory, who has a fine body of deputy co-ordinators serving him, and who in turn have several project chiefs co-ordinating efforts in their own scientific disciplines. It is expected that Project Oil will continue for the next few months and in the end one of the better results will be a compendium of knowledge on pollution caused by this fuel in a cold water environment. Most important will be the fact that it is a co-ordinated scientific and technological contribution from many diverse, as well as closely related fields of study. This is the foremost of a multi-disciplinary study to date and will serve as a model for similar unfortunate incidents that may be man's lot to face in the near future.

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