

NATIONAL RESEARCH COUNCIL OF CANADA
ASSOCIATE COMMITTEE ON SOIL AND SNOW MECHANICS

PROCEEDINGS
OF THE
FIRST CANADIAN CONFERENCE ON PERMAFROST
17 AND 18 APRIL 1962

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FOREWORD

This is a record of the First Canadian Conference on Permafrost which was held at the National Research Council, Ottawa, Ontario, on 17 and 18 April 1962. The Conference was sponsored by the Associate Committee on Soil and Snow Mechanics of the National Research Council. A list of those in attendance is included as Appendix "A" of these proceedings.

The overall theme of the Conference was permafrost in relation to northern development. A wide variety of topics was considered, including phases of basic research, design and practice as they pertain to a variety of problems arising from permafrost: geology, climate, vegetation, soil, heat flow, economics, site investigations and construction. In Session I, under the chairmanship of Mr. T. A. Harwood, five papers were presented. Session II was chaired by Dr. T. Lloyd and five papers were presented. The Chairman of Session III was Dr. J. R. Mackay; five papers were presented. The chairman of Session IV was Dr. R. F. Legget, at which four papers were presented. The Conference was concluded with a showing of the colour film "Building in the North" produced for the Division of Building Research, National Research Council by the National Film Board of Canada. Of the 19 papers presented at the Conference, 13 are reproduced in their entirety in this proceedings and 6 are presented in summary form.

The attention of the reader is directed to the maps immediately preceding the first paper showing the distribution of permafrost in Canada, the U. S. S. R., and the northern hemisphere.

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INTRODUCTORY REMARKS

Dr. R. F. Legget, Director of the Division of Building Research, National Research Council, cordially welcomed delegates to Ottawa on behalf of Dr. E. W. R. Steacie, President of the National Research Council, who was unable to attend. Dr. Legget pointed out the importance of the Conference being the first one on permafrost to be held in Canada. He reviewed briefly the development of permafrost investigations in this country during the past decade and noted with satisfaction the present widespread interest as evidenced by the attendance of more than 150 delegates. It was his hope that the Conference would prove interesting and valuable to those present.

Mr. T. A. Harwood, Chairman of the Permafrost Subcommittee, Associate Committee on Soil and Snow Mechanics, welcomed those present and encouraged the delegates to contribute to the discussion at the end of each paper. He drew attention to the photographic displays which were set up outside the auditorium in which the Conference was held and hoped that delegates would avail themselves of the opportunity to view these displays. Announcements were made pertinent to luncheon arrangements, etc.