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FOURTH INTERNATIONAL CONFERENCE ON PERMAFROST FAIRBANKS, 18 – 22, JULY 1983

When, in 1963, a relatively small group of permafrost scientists assembled for the First International Conference on Permafrost at Purdue University in Lafayette, U.S.A., no one expected this conference to be the beginning of a new cycle of exceptionally important international scientific congresses which were to continue till now. Ten years after the Lafayette gathering, in 1973, a permafrost conference was organized in Yakutsk, Syberia. It was the first one held in a periglacial environment with direct access from the conference hall to the object of the conference. In Yakutsk it was decided that conferences of this type should take place every five years. Canada undertook the organization of the next conference which was held in Edmonton in 1978 and included extensive field trips to the vast permafrost areas of northern Canada. The conference in Fairbanks being the fourth of this cycle resembled in part the conference in Yakutsk. In both places, one-day field trips organized during the session offered the opportunity to observe the magnificent permafrost cross-sections in the immediate vicinity of the city.

The organizers of the conference were the National Academy of Sciences in Washington and its Polar Research Board as well as institutions and authorities of the State of Alaska, particularly the University of Alaska in Fairbanks. The Organizing Committee was presided by Dr. T. L. PÉWÉ, the known Alaska researcher and present professor of geology at Arizona State University in Tempe, Arizona. Dr. G. E. WELLER, geophysicist of Alaska University acted as Vice-Chairman. The representative of the U. S. Army Cold Regions Research and Engineering Laboratory of Hanover, New Hampshire, Dr. J. BROWN, was perhaps the most active and popular person at the conference.

With 900 participants representing scientific institutions of 25 countries, the Fairbanks conference was the largest meeting of this kind organized till then. As might be expected, the most numerous were the U. S. and Canadian delegations, since these countries take a direct interest in the permafrost of Alaska and northern Canada. It is worth mentioning that the Chinese People's Republic

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delegated a relatively numerous group of 20 participants, which shows the growing interest of this country in the subject of the conference, as permafrost occurs in almost one fourth of China's territory. The Soviet delegation, headed by Professor P. J. MELNIKOV, was made up of 6 persons. Only one participant came from Poland, which hardly corresponds with the relatively large share of Polish researchers in international investigations into permafrost.

The time occupied by discussions in Fairbanks was only five days but the whole meeting lasted for over three weeks and included pre- and post-conference field trips. Of these excursions, four in number, the longest was to Northern Yukon Territory and Mackenzie Delta, guided by H. M. FRENCH and J. A. HEGINBOTTOM. The next in turn led from Fairbanks to the north, alongside the pipeline to Prudhoe Bay at Beaufort Sea and was conducted by J. BROWN and R. KREIG. The third trip, guided by T. L. PÉWÉ and R. D. ROGERS, started from Fairbanks southwards to Anchorage via Copper River Basin, and the fourth, led by S. E. RAWLINSON and H. J. WALKER, went to the Colville River Delta by the Beaufort Sea. Besides, there were several short-distance excursions into the vicinity of Fairbanks and Anchorage.

The discussions were of dual character: panel sessions and paper sessions. Among the problems for discussion the subject of "permafrost and pipeline construction" was brought into the foreground. On the first day of the conference, at panel session, the pipeline designers of U.S.A., U.S.S.R., and Canada imparted and exchanged their experiences gained in laying oil and gas pipelines in their territories. Of the other topics presented at the paper sessions the following should be mentioned: climate change and geothermal regime, deep foundations in permafrost areas, permafrost terrain and environmental protection, subsea permafrost, problems of periglacial geomorphology and geocryology, distribution of permafrost (regional studies), physics and chemistry of frozen ground. A new problem introduced at the conference was planetary permafrost, the problem being presented by several, excellently illustrated papers dealing with permafrost on Mars. This planet with its surface resembling a periglacial scenery covered with vast solifluction lobes and polygonal forms of ground ice may be evidence that permafrost problems are not restricted to our globe.

The conference in Fairbanks will be recorded in the history of science because one of its outcomes was the establishment of a new scientific organization, the International Permafrost Association. It was called into being on the final plenary session, on July 21, 1983, on the motion of the representatives of four countries — U.S.A., Canada, U.S.S.R., and China. Professor P. I. MELNIKOV, U.S.S.R., was elected to be chairman of the association, and Professor T. L. PÉWÉ, U.S.A., and Kaare FLAATE, Norway, were chosen vice-chairmen. Professor J. R. MACKAY, Canada, was chosen secretary of the organization. The next congress of



Pl. 1. The participants of the post-conference field trip B-4 on the route Fairbanks-Anchorage. In the center of the first row — Dr. T. L. PÉWÉ (X), Chairman of the Organizing Committee of the conference

permafrost researchers now being members of the International Permafrost Association will be held in 1988 in Norway, which accounts for the representation of Norwegians on the board of the association.

During the conference in Fairbanks a meeting was held of the Commission of the Significance of Periglacial Phenomena, the International Geographical Union, which was presided by its chairman H. M. FRENCH of Canada.

Translated by U. Jakubowska