Journal of Glaciology, Vol. 13, No. 67, 1974

GLACIOLOGICAL LITERATURE

THIS is a selected list of glaciological literature on the scientific study of snow and ice and of their effects on the Earth; for the literature on polar expeditions, and also on the "applied" aspects of glaciology, such as snow ploughs, readers should consult the bibliographies in each issue of *Recent Polar Literature* (supplement to the *Polar Record*). For Russian material the system of transliteration used is that agreed by the U.S. Board on Geographic Names and the Permanent Committee on Geographical Names for British Official Use in 1947. Readers can greatly assist by sending reprints of their publications to the Society, or by informing Dr J. W. Glen of publications of glaciological interest. It should be noted that the Society does not necessarily hold copies of the items in this list, and also that the Society does not possess facilities for microfilming or photocopying.

CONFERENCES

AKADEMIYA NAUK SSSR. SEKTSIYA NAUK O ZEMLE. SIBIRSKOYE OTDELENIYE. *II Mezhdunarodnaya Konferentsiya po Merzlotovedeniyu. Doklady i soobshcheniya* [*2nd International Conference on Permafrost. Papers and reports*]. Yakutsk, Yakutskoye Knizhnoye Izdatel'stvo, 1973. 7 vols.: 103 p.; 154 p.; 102 p.; 246 p.; 127 p.; 111 p.; 272 p. [185 Russian contributions to conference held in Yakutsk, July 1973.]

DYUNIN, A. K., *and* KRASNOSEL'SKIY, E. B., *ed. Inzhenernaya glyatsiologiya. Trudy 1 vsesoyuznogo koordinatsionnogo soveshchaniya po inzhenernoy glyatsiologii (6–9 aprelya 1970 g., g. Kirovsk)* [*Engineering glaciology. Transactions 1 of the co-ordinating conference on engineering glaciology (6–9 April 1970, Kirovsk)*]. Apatity, Kol'skiy Filial Akademii Nauk SSSR, 1973. 234 p. [44 papers.]

WETTELAND, S. S., *and* BRUUN, P., *ed. Proceedings, the first international conference on port and ocean engineering under Arctic conditions. The Technical University of Norway, Trondheim, Norway, Aug. 23–30, 1971.* [Trondheim, Technical University of Norway, 1972.] 2 vols.: xv, 888 p.; [i], 889–1457 p. [Includes the following papers: W. Dansgaard, S. J. Johnsen, H. B. Clausen and C. C. Langway, Jr., "Climatic oscillations depicted and predicted by isotope analyses of a Greenland ice core", p. 17–22; R. Frederking and L. W. Gold, "Ice forces on an isolated circular pile", p. 73–92; S. L. DenHartog, "SS *Manhattan* tests. A review of the ice program", p. 101–11; A. Assur, "Forces in moving ice fields", p. 112–18; L. R. Breslau, J. E. James, M. D. Tramell and C. E. Behlke, "The underwater shape of a grounded ice island off Prudhoe Bay, Alaska", p. 119–39; T. Carstens, "Prevention of ice formation by forced mixing", p. 140–51; W. F. Weeks, A. Kovacs and W. D. Hibler, III, "Pressure ridge characteristics in the Arctic coastal environment", p. 152–83; E. Palosuo, "Ice ridges in a coastal area of Finland", p. 184–91; R. O. Ramseier, "Mechanical properties of snow ice", p. 192–210; G. D. Sharma, J. D. Kreitner and D. W. Hood, "Sea ice characteristics in Bering Sea", p. 211–20; R. Y. Edwards, J. W. Lewis and D. L. Benze, "An Arctic ice model basin—design, construction, and operating experience", p. 541–68; C. H. Atkinson, D. L. R. Cronin and J. V. Danys, "Measurement of ice forces against a lightpier", p. 569–81; F. Gerritsen, "Ice problems in the Dutch rivers and estuaries", p. 582–608; J. V. Danys, "Effect of cone-shaped structures on impact forces of ice floes", p. 609–20; H. R. Kivisild, "Year-round oil terminal in ice covered waters", p. 621–31; K. R. Maser, "The interpretation of small scale strength data for ice", p. 632–56; E. Reinius, S. Haggård and E. Ernstsons, "Experiences of offshore lighthouses in Sweden", p. 657–73; B. Ross, S. Hanagud and G. S. Sidhu, "Ice floe–offshore platform interaction", p. 674–82; P. M. Bruun and P. Johannesson, "The interaction between ice and coastal structures", p. 683–712; A. O. Straumsnes and P. M. Bruun, "Comparison between spray and splash at some typical permeable coastal structures and the influence of ice floes deposited on these structures on spray and splash quantities", p. 713–23; H. A. R. Steltner, "Canadian Arctic sea/air base at Radstock Bay, Devon Island, N.W.T.", p. 724–77; J. W. Goode and A. E. Teller, "Ice breakage with explosives", p. 786–89; N. Reeh and F. Engelund, "Longperiod waves generated by calving glaciers", p. 1257–61; E. Hulgaard and T. Sørenson, "Ice cover prevention by means of air bubbles, Narssaq, Greenland", p. 1355–66; E. Tesaker, "The influence of an ice cover on the thickness of the surface flow in a stratified fiord", p. 1441–44.]

GENERAL

CHIAO, R. Y., *and* WICKRAMASINGHE, N. C. The expulsion of dust from galaxies. *Astrophysical Letters*, Vol. 14, No. 1, 1973, p. 19–23. [Conditions for expulsion of dust particles from several types of galaxies examined. Ice particles may be expelled from spiral or irregular galaxies, but not elliptical galaxies.]

HAUPT, I. Untersuchungen der Eisverhältnisse im Polargebiet anhand von Satellitenbeobachtungen. *Annalen der Meteorologie*, Nr. 6, 1973, p. 352. [Abstract. Fluctuations in ice conditions between different months and years of the period 1966–70 were observed by means of satellite and conventional data, and the state of the ice, temperature and wind conditions were correlated.]

LORIUS, C. Otchet o glyatsiologicheskikh rabotakh sovetsko-frantsuzskogo otryada devyatoy Sovetskoy Antarkticheskoy Ekspeditsii 1963/64 g. [Report on the glaciological work of the Soviet–French group of the ninth Soviet Antarctic Expedition of 1963–64]. *Trudy Sovetskoy Antarkticheskoy Ekspeditsii*, Tom 60, 1972, p. 65–99.

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KUDRYASHOV, B. B., *and* FISENKO, V. F. Analiz i puti sovershenstvovaniya protsessa bureniya-protaivaniya vo l'dakh Antarktidy [Analysis and ways of improving thermal drilling processes in Antarctic ice]. *Trudy Sovetskoy Antarkticheskoy Ekspeditsii*, Tom 60, 1972, p. 129–43.

PARUNGO, F. P., *and* PUESCHEL, R. F. Ice nucleation: elemental identification of particles in snow crystals. *Science*, Vol. 180, No. 4090, 1973, p. 1057–58. [Scanning field-emission electron microscope and X-ray analyser used to locate and identify snow crystal nuclei.]

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PHYSICS OF ICE

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FINK, U., *and others*. Infrared spectra of the Galilean satellites of Jupiter, [by] U. Fink, N. H. Dekkers and H. P. Larson. *Astrophysical Journal*, Vol. 179, No. 3, Pt. 2, 1973, p. L155–59. [Results show Europa and Ganymede have large amounts of ice on surface, Callisto has some faint ice absorptions.]

FURUSHIMA, T. Sukēto no masatsu teikō ni kansuru kenkyū [Study on the frictional resistance of skates]. *Seppyō*, Vol. 34, No. 1, 1972, p. 9–14. [Theoretical study of friction of a skate on ice. English summary, p. 14.]

GUIGO, E. I., *and* TSVETKOV, Ts. D. Analiticheskoye issledovaniye protsessa vnutrennego massoperenosa pri vakuumoy sublimatsionnoy syshke materialov [Analytical study of internal mass transfer during the vacuum sublimation drying of materials]. *Inzhenerno-Fizicheskiy Zhurnal*, Tom 23, No. 5, 1972, p. 868–70. [Theoretical study of rate of sublimation of ice during freeze-drying process. English summary, p. 870.]

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HIGASHI, A., *and* KAWABATA, J. Kōri tankesshō-chū no jiko kakusan ni taisuri ten'i mitsudo no eikyō [Dislocation enhanced diffusion in single crystals of ice]. *Seppyō*, Vol. 34, No. 2, 1972, p. 61–72. [Measurement of diffusion coefficient in undeformed and deformed Mendenhall Glacier ice crystals. English summary, p. 71–72.]

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LA PLACA, S. J., *and others*. On a nearly proton-ordered structure for ice IX, [by] S. J. La Placa and W. C. Hamilton and [W.] B. Kamb and A. Prakash. *Journal of Chemical Physics*, Vol. 58, No. 2, 1973, p. 567–80. [Neutron diffraction experiments on D_2O specimens show ordered structure with about 4% deuterons not on ordered sites.]

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MAENO, N. Enso o fukumu tankesshō-hyō no yūdenteki seishitsu [The dielectric properties of single crystals of ice containing chlorine]. *Teion-kagaku: Low Temperature Science*, Ser. A, [No.] 30, 1972, p. 9–21. [Single crystals, unlike polycrystals, grown from KCl solution, incorporate Cl^- ions preferentially. Dielectric constant of such crystals is less than that of pure ice and conductivity is proportional to square root of chlorine concentration. English summary, p. 21.]

MAENO, N. Single crystals of ice grown from KCl solution and their dielectric properties. *Canadian Journal of Physics*, Vol. 51, No. 10, 1973, p. 1045–52. [Small amounts of Cl, but no K, incorporated substitutionally. Dielectric permittivity and relaxation time reduced, low frequency conductivity increased. Discussion in terms of lattice defects.]

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MORACHEVSKIY, V. G., *and others*. K voprosu o l'doobrazuyushchey aktivnosti veshchestv [On the question of the ice-forming activity of substances]. [By] V. G. Morachevskiy, N. A. Dubrovich, A. G. Popov [and] A. N. Potanin. *Zhurnal Prikladnoy Khimii*, Tom 46, Vyp. 3, 1973, p. 545–48. [Infra-red spectroscopy used to study sorption of water molecules on AgI before and after ultra-violet irradiation.]

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RAPATZ, G., *and* LUYET, B. Patterns of ice formation in albumin solutions. *Biodynamica*, Vol. 11, No. 235, 1972, p. 125–36. [Description of patterns for different concentrations and freezing rates.]

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UCHIDA, E. Rēzā-kō ni yoru takesshōhyō no kōgakuteki kōzō no kaiseki [Preliminary analysis on the optical structure of polycrystalline ice crystals using laser light]. *Seppyō*, Vol. 34, No. 1, 1972, p. 1–8. [Correlations between optic axes of neighbouring grains in frozen water drops found to be quite small. English summary, p. 8.]

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YERSHOV, B. G., *and others*. Radiotermolyuminestsentsiya l'da v prisutstvii dobavok [Radiothermoluminescence of ice in the presence of impurities]. [By] B. G. Yershov, S. A. Puntezhis, A. K. Pikayev, V. I. Spitsyn. *Doklady Akademii Nauk SSSR*, Tom 209, No. 4, 1973, p. 889–912. [Effect of various alkaline impurities and of HF on the radiothermoluminescence of ice γ-irradiated at 77 K.]

LAND ICE. GLACIERS. ICE SHELVES

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BARKOV, N. I., *and* UVAROV, N. N. Geofizicheskiye issledovaniya skvazhiny na stantsii Vostok v 1970 [Geophysical research in the bore hole at Vostok station in 1970]. *Informatsionnyy Byulleten' Sovetskoy Antarkticheskoy Ekspeditsii*, No. 85, 1973, p. 29–34. [Studies temperature of ice in upper 500 m of ice sheet, γ activity of removed ice, and condition of bore hole.]

BARKOV, N. I., *and others*. Bureniye skvazhiny v lednikovom pokrove Antarktidy na stantsii Vostok v 1970 g. [Bore-hole drilling through the Antarctic ice cover at Vostok station in 1970]. [By] N. I. Barkov, N. Ye. Bobin, G. K. Stepanov. *Informatsionnyy Byulleten' Sovetskoy Antarkticheskoy Ekspeditsii*, No. 85, 1973, p. 22–28. [Account of drilling, mentioning difficulties encountered.]

CHEREPANOV, N. V., *and* KOZLOVSKIY, A. M. Osenneye obrazovaniye vnutrivodnogo l'da v rayone shel'fovogo lednika Lazareva [Autumn formation of interwater ice in the Lazarev ice shelf]. *Informatsionnyy Byulleten' Sovetskoy Antarkticheskoy Ekspeditsii*, No. 86, 1973, p. 36–38.

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ERRATA

Vol. 10, No. 59, p. 328. In the eighth entry the authors should read AUFDERHEIDE, A. C., *and* PITZL, G.

Vol. 10, Index, p. 438. After Pinson, W. H. add Pitzl, G., 328.