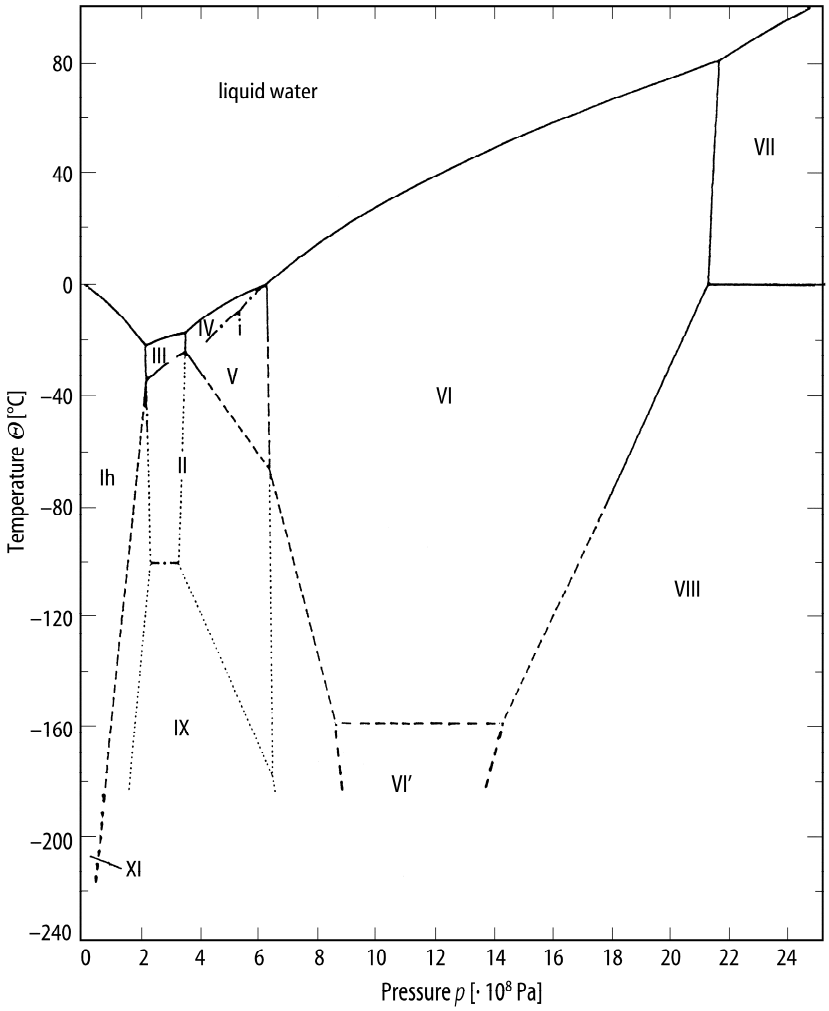

Fig. M19-001. H_2O (ice). Phase diagram [69Wha, 80Mis, 89Kaw1]. Solid line: phase boundary, dashed line: phase boundary estimated by extrapolation, dotted line: boundary for metastable state obtained by extrapolation. Chain line around phases IV and V: boundary for metastable state obtained by measurement.

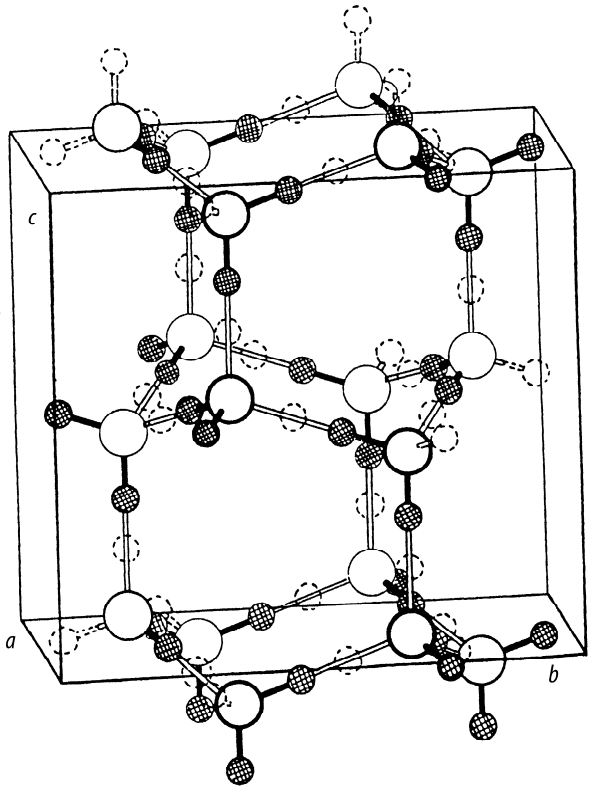

Fig. M19-002. D_2O (deuterated ice). Structure of phase XI [85Lea]. In this ordered structure (space group $Cmc2_1$) the deuteriums (hatched circles) have unit site occupancy. The fully disordered structure (space group $P6_3/mmc$) is obtained when the deuteriums, represented by hatched and dashed circles, each have site occupancy 0.5.

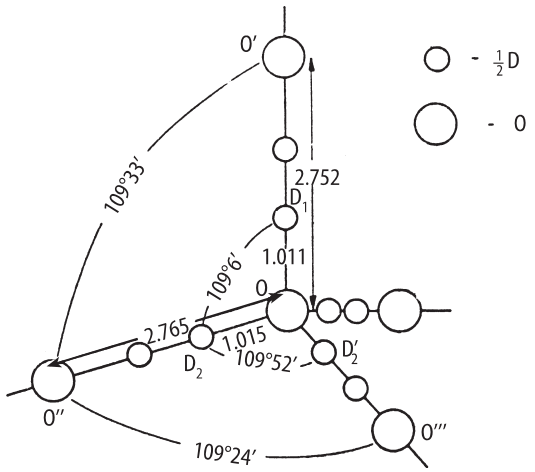

Fig. M19-003. D_2O (deuterated ice). Structure of phase Ih by neutron diffraction [57Pet]. Average atomic arrangement of one tetrahedron at 223 K. Interatomic distances are given in [Å].

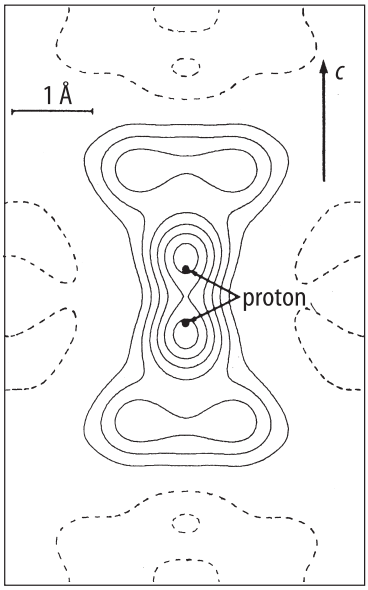

Fig. M19-004. H_2O (ice). Structure of phase Ih by X-ray diffraction [90Got]. Electron density map of hydrogen atom along oxygen-oxygen bond at 253 K. The unit of contour lines is $0.05e/Å^3$. Positions of the maximum density shift from those determined by the least-squares fit towards the oxygen atoms.

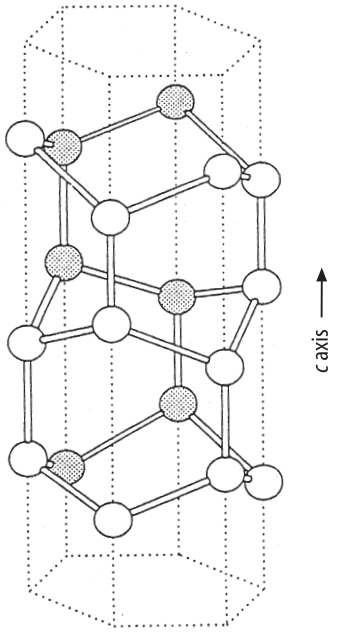

Fig. M19-005. H_2O (ice). Structure of phase Ih [90Got]. The oxygen atoms around a hexagonal hollow channel along the *c* axis are shown. Protons are not shown.

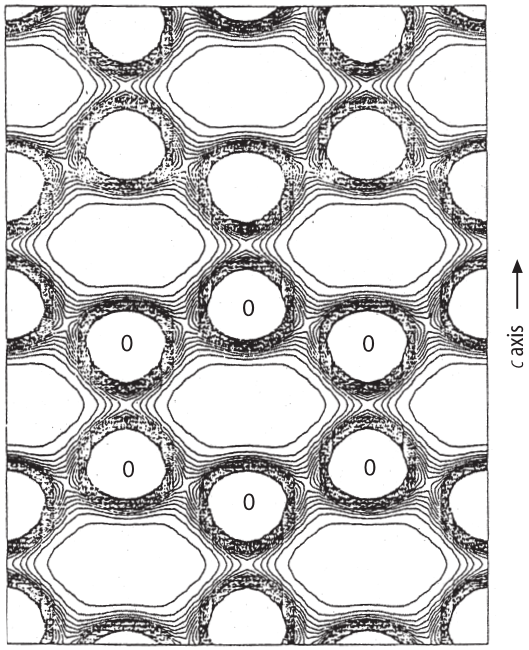

Fig. M19-006. H_2O (ice). Structure of phase Ih at 243 K [90Got]. Electron density map for hinge (or boat) conformation determined by maximum entropy method. The map is drawn as the hinge is stretched. See the structure shown in Fig. M19-005. Contour lines are drawn from 0.05 to 1.0 with 0.05e/Å^3 intervals. Too dense regions correspond to core electrons of oxygen atoms which are omitted and labeled as "O".

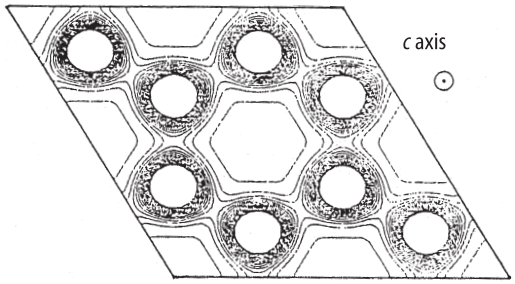

Fig. M19-007. H_2O (ice). Structure of phase Ih at 243 K [90Got]. Electron density map for chair conformation. The map is the projection of one layer of chair conformation along the c axis. See the structure shown in Fig. M19-005. Contour lines are drawn in the same manner as Fig. M19-006.

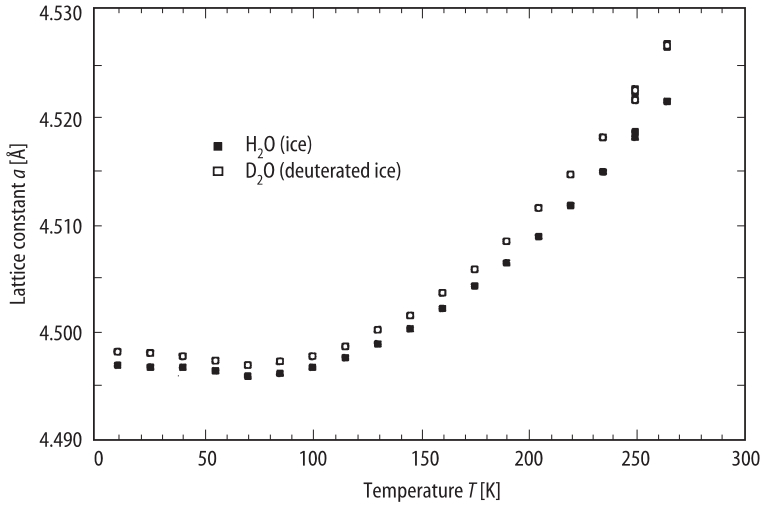

Fig. M19-008. H_2O, D_2O (ice). *a* vs. *T* [94Rot]. *a*: lattice constant.

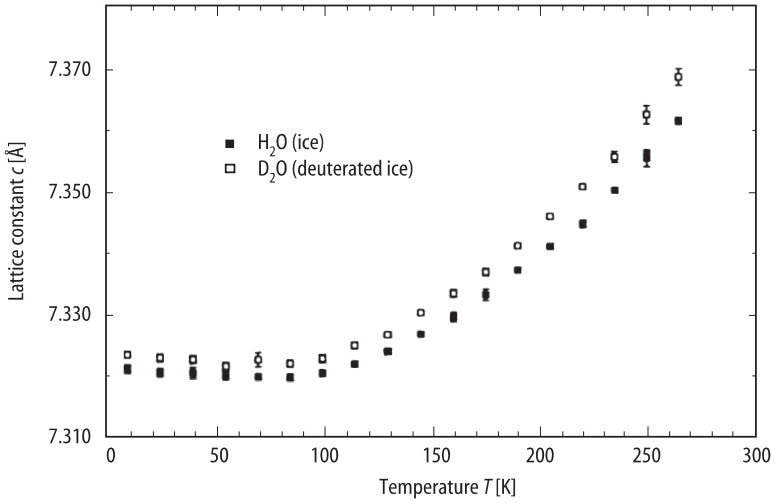

Fig. M19-009. H_2O, D_2O (ice). *c* vs. *T* [94Rot]. *c*: lattice constant.

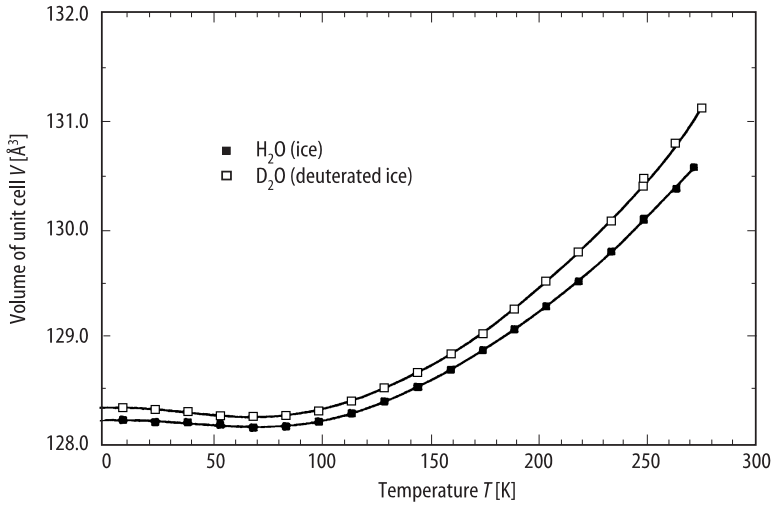

Fig. M19-010. H_2O, D_2O (ice). *V* vs. *T* [94Rot]. *V*: volume of unit cell.

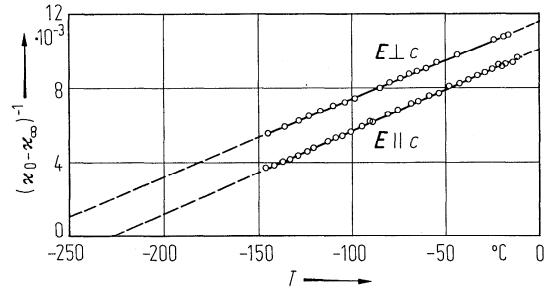

Fig. M19-011. H_2O (ice). $(\kappa_0 - \kappa_\infty)^{-1}$ vs. T of ice Ih [78Kaw]. κ_0, κ_∞: static and high frequency dielectric constant, respectively.

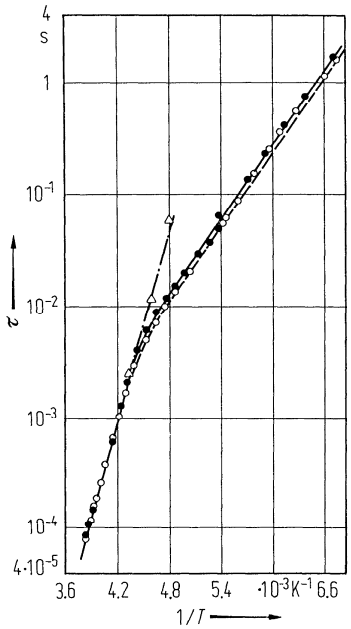

Fig. M19-012. H_2O (ice). τ vs. T^{-1} of ice Ih [78Kaw]. τ: dielectric relaxation time. Open circles: $\boldsymbol{E} \parallel \boldsymbol{c}$; full circles: $\boldsymbol{E} \perp \boldsymbol{c}$; triangles: data by [52Aut].

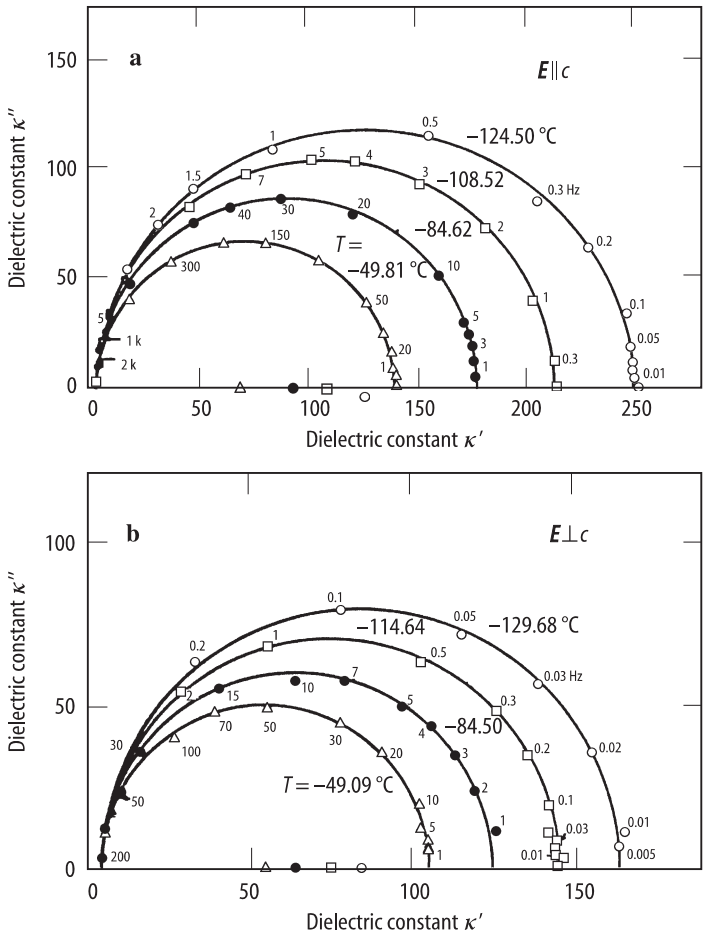

Fig. M19-013. D_2O (deuterated ice). Cole-Cole plot of complex dielectric constant [79Kaw]. Parameter: *T*. (**a**) ***E*** || ***c***; (**b**) ***E*** ⊥ ***c***.

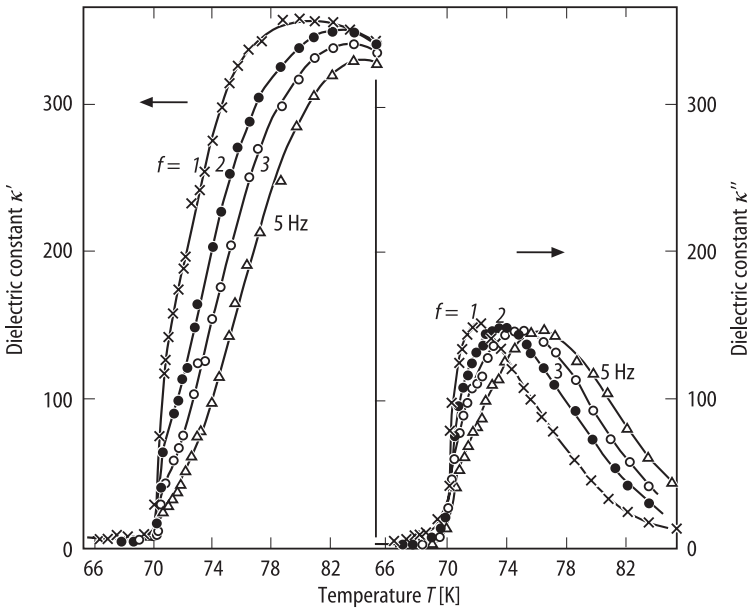

Fig. M19-014. H_2O:KOH (polycrystal doped with 0.101 N KOH). κ', κ'' vs. T [72Kaw]. Parameter: f.

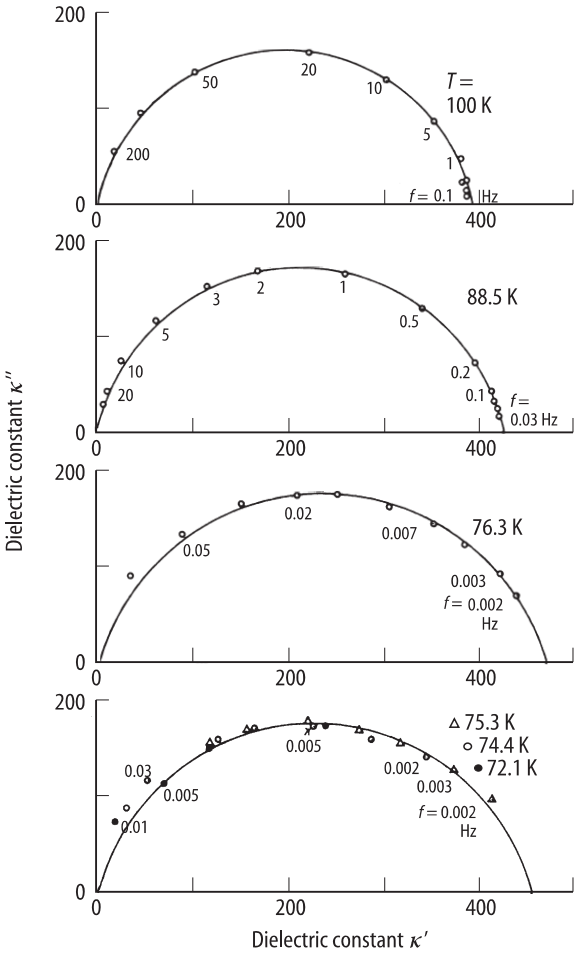

Fig. M19-015. D_2O:KOH (polycrystal). Cole-Cole plot of complex dielectric constant [89Kaw2]. Parameter: *T*. KOH doping density: 1 mol m^{-3}.

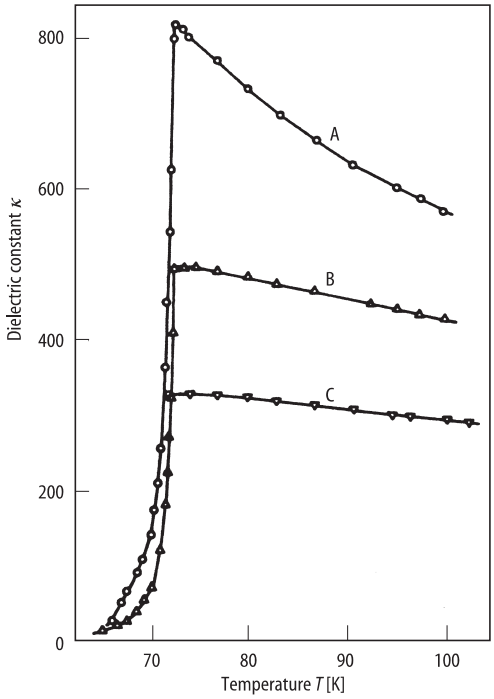

Fig. M19-016. H_2O:KOH. κ vs. T [91Ogu]. A: $\boldsymbol{E} \parallel \boldsymbol{c}$; B, C: $\boldsymbol{E} \perp \boldsymbol{c}$. A, B: measured on heating after annealing for transformation, C: measured on cooling.

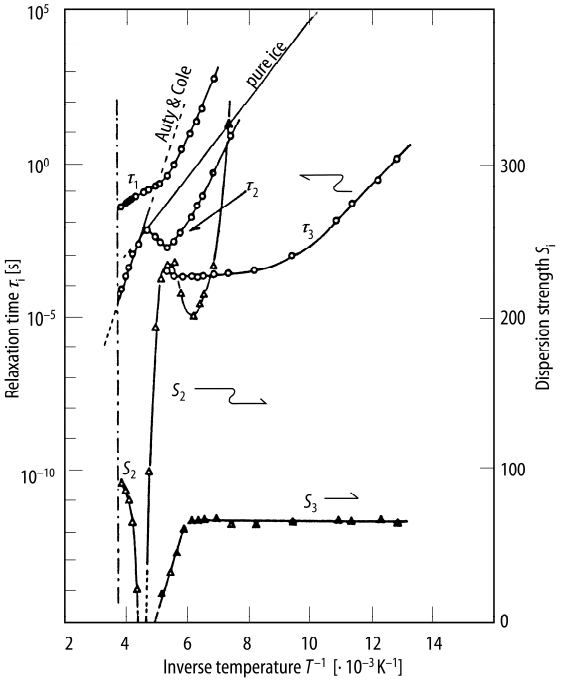

Fig. M19-017. H_2O:KOH. τ_i, S_i vs. $1/T$ [92Kaw]. τ_i, S_i: relaxation time and dispersion strength appeared in dispersion spectra of the dielectric constant in 0.41 ppm KOH-doped ice single crystal (*a*-plate). The lines of pure ice and Auty-Cole: see Fig. M19-012.

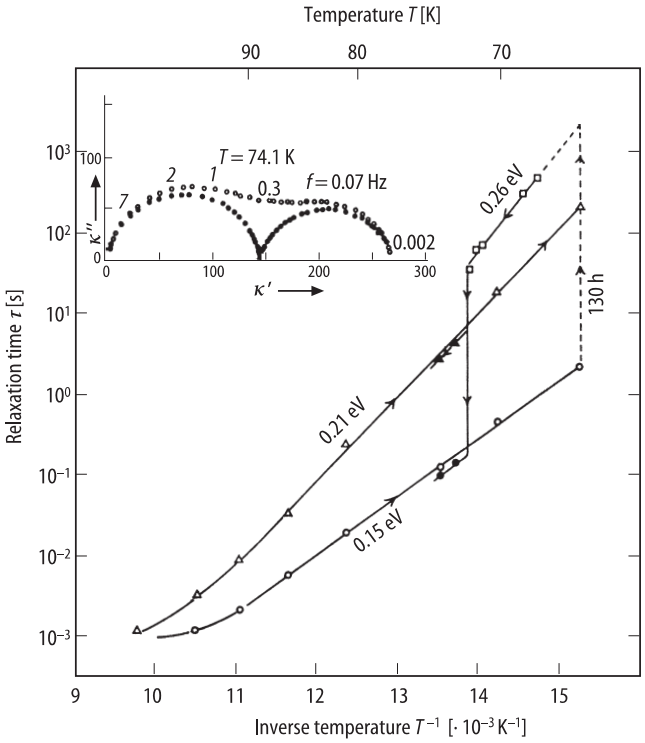

Fig. M19-018. H_2O:KOH. τ vs. $1/T$ [89Kaw3]. τ: dielectric relaxation time in 2.2 ppm KOH-doped ice single crystal (*c*-plate). The arrows show the direction of temperature variation and the time figure shows the period of annealing at 65 K. Activation energies are presented in the figure. The insert is a Cole-Cole plot of the complex dielectric constant at 74.1 K. Open circle: measured values, full circle: two dispersion branches separated by the least square method.

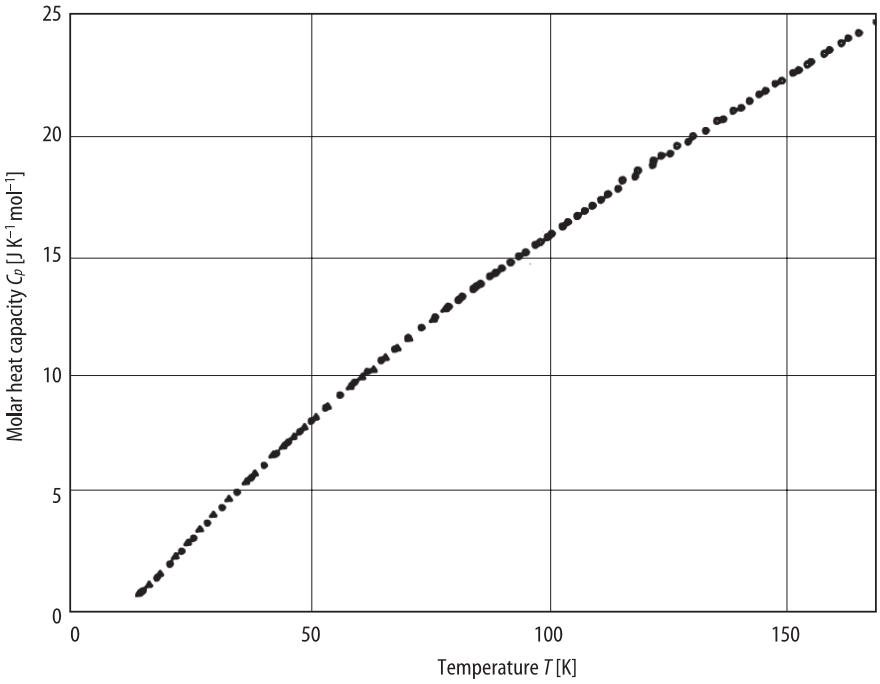

Fig. M19-019. H_2O (ice). Global view of C_p vs. T [87Yam]. C_p: molar heat capacity of pure ice. Data of Ic, Ih are layed onto each other. Ih data are also quoted from [74Hai].

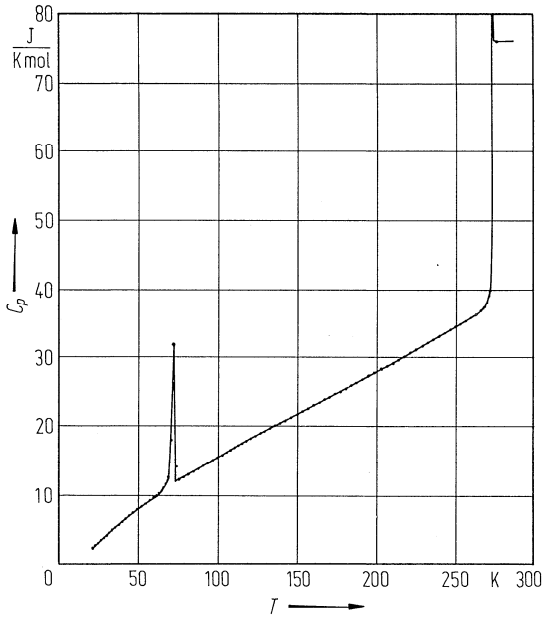

Fig. M19-020. H_2O:KOH. C_p vs. T [84Taj]. C_p: molar heat capacity of ice doped with 1 mol m^{-3} KOH.

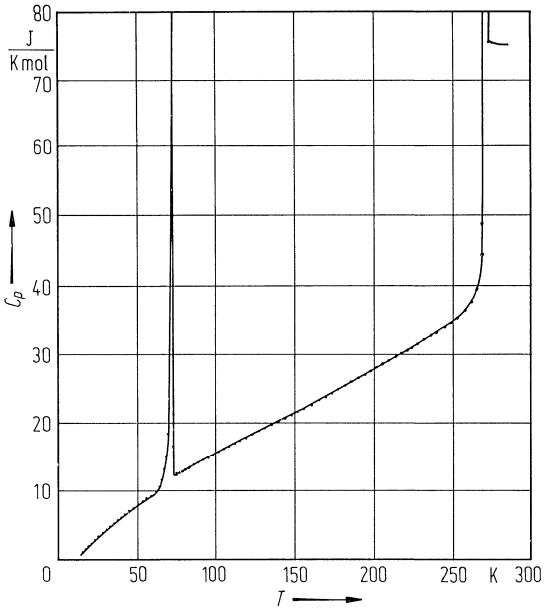

Fig. M19-021. H_2O:KOH. C_p vs. T [84Taj]. C_p: molar heat capacity of ice doped with 10 mol m^{-3} KOH.

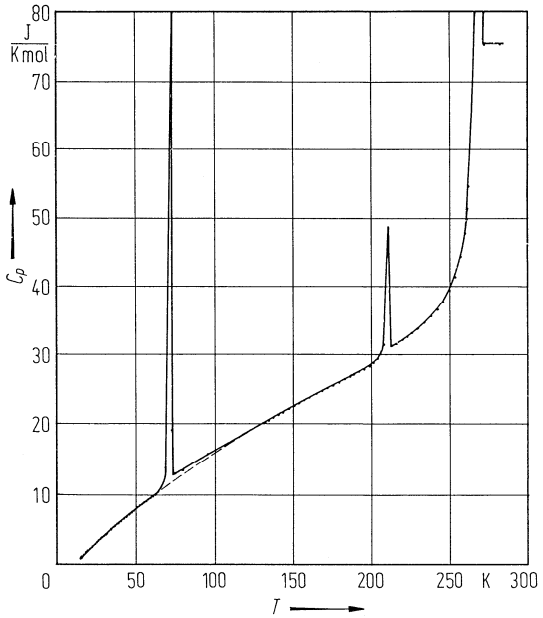

Fig. M19-022. H_2O:KOH. C_p vs. T [84Taj]. C_p: molar heat capacity of ice doped with 10^2 mol m^{-3} KOH.

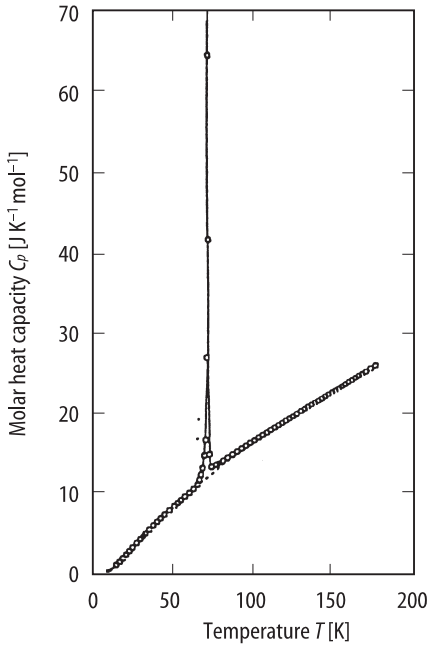

Fig. M19-023. H_2O:LiOH. C_p vs. T [88Miy]. C_p: molar heat capacity of ice doped with 10^2 mol m^{-3} LiOH.

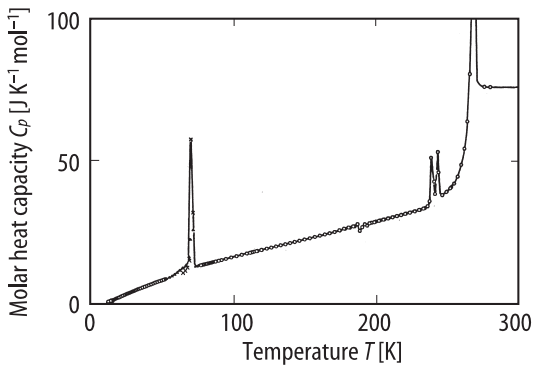

Fig. M19-024. H_2O:NaOH. C_p vs. T [87Mat]. C_p: molar heat capacity of ice doped with 10^2 mol m^{-3} NaOH.

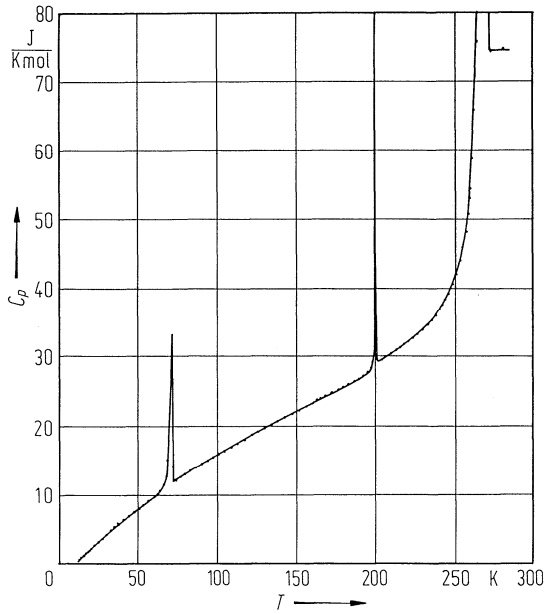

Fig. M19-025. H_2O:RbOH. C_p vs. T [84Taj]. C_p: molar heat capacity of ice doped with 10^2 mol m^{-3} RbOH.

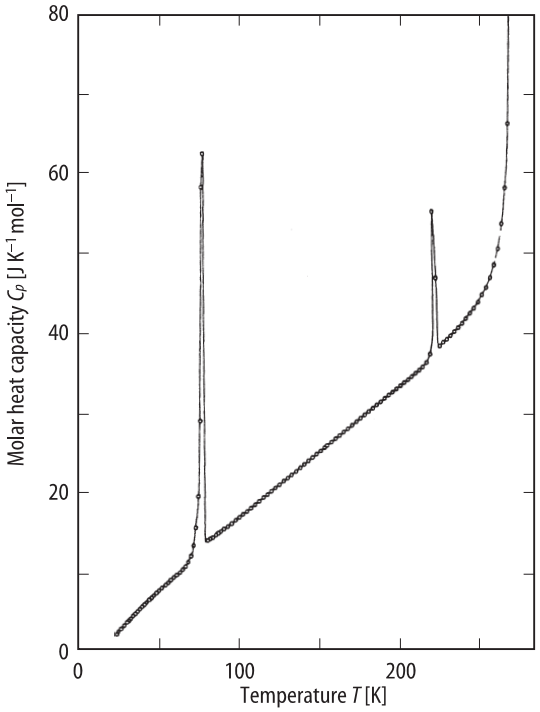

Fig. M19-026. D_2O:KOD. C_p vs. T [86Mat]. C_p: molar heat capacity of deuterated ice doped with 10^2 mol m^{-3} KOD.

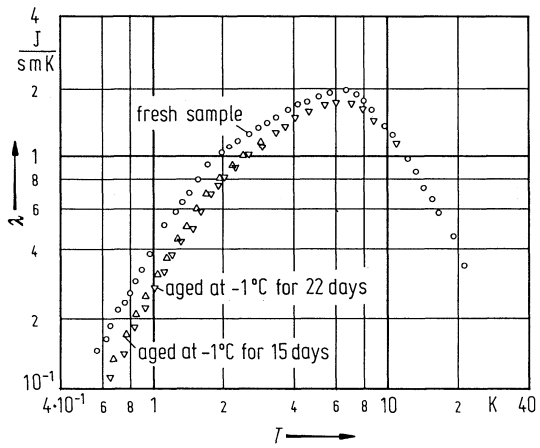

Fig. M19-027. H_2O (ice). λ vs. T [83Kli]. λ: thermal conductivity perpendicular to the c axis.

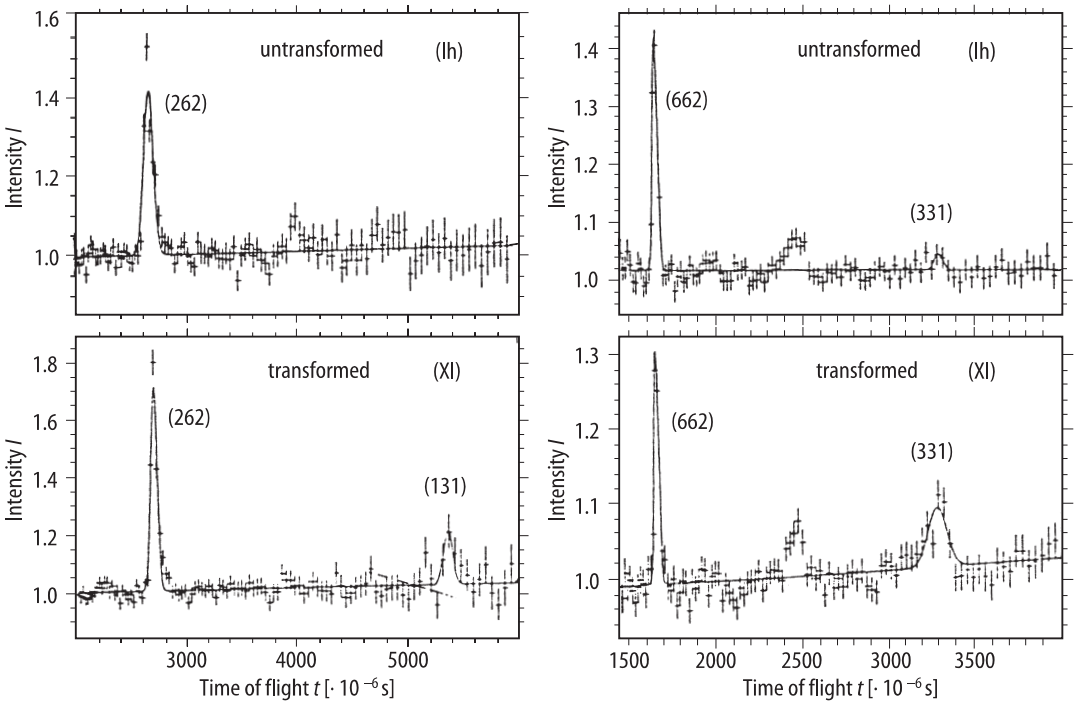

Fig. M19-028. H_2O:KOH. I vs. t [92Ogu]. I: normalized neutron counts. t: time of flight. Upper spectra were obtained in ice Ih. Lower spectra were obtained after heat treatment for transformation. The latter show the presence of the weak 131 and 331 peaks in ice XI.

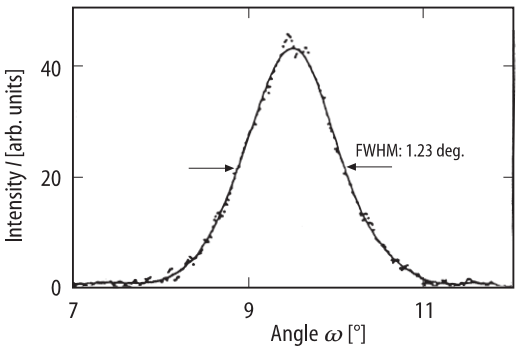

Fig. M19-029. H_2O (ice). The $2\theta/\omega$ profile of X-ray diffuse scattering intensity I around the forbidden (1121) reciprocal lattice point in ice Ih [92Got]. T = 253 K. The value of FWHM (full width at half maximum) is 4.5 times broader than those of Bragg reflections.

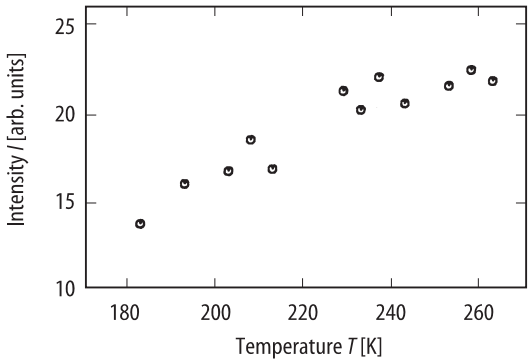

Fig. M19-030. H_2O (ice). I vs. T in phase Ih [92Got]. I: X-ray spot-like diffuse intensity around the forbidden (1121) reflection.