

Fig. 31A-5-001. $\text{Cs}(\text{H}_x\text{D}_{1-x})_3(\text{SeO}_3)_2$. x vs. $\Theta_{\text{II-I}}$ [69Gie].

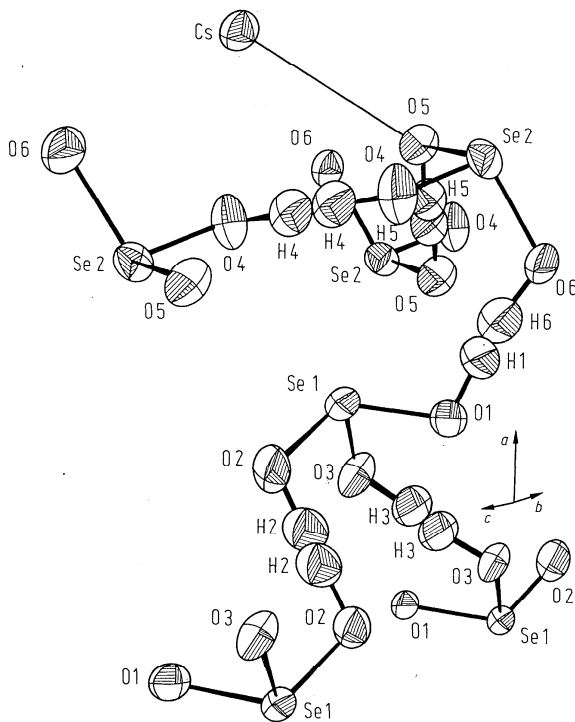


Fig. 31A-5-002. $\text{CsH}_3(\text{SeO}_3)_2$. Crystal structure of phase I [78Cho]. A sketch of the disordered hydrogens at RT.

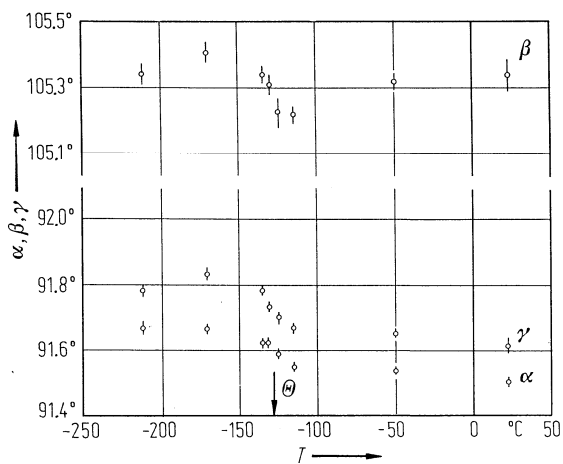


Fig. 31A-5-003. $\text{CsH}_3(\text{SeO}_3)_2$. α , β , γ vs. T [86Ich]. α , β , γ : interaxial angles.

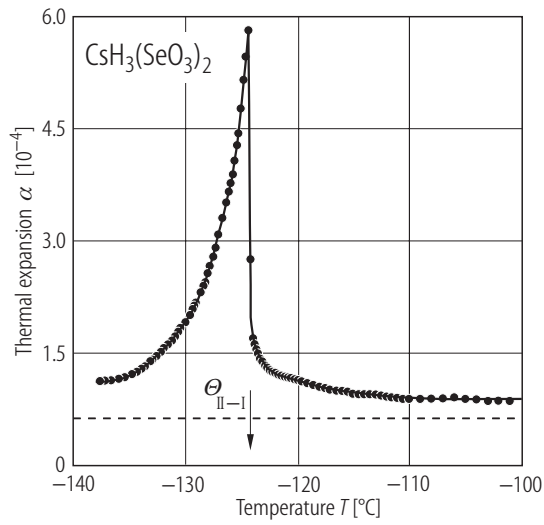


Fig. 31A-5-004. $\text{CsH}_3(\text{SeO}_3)_2$. α vs. T [85Kom]. α : thermal expansion coefficient perpendicular to the (100) plane.

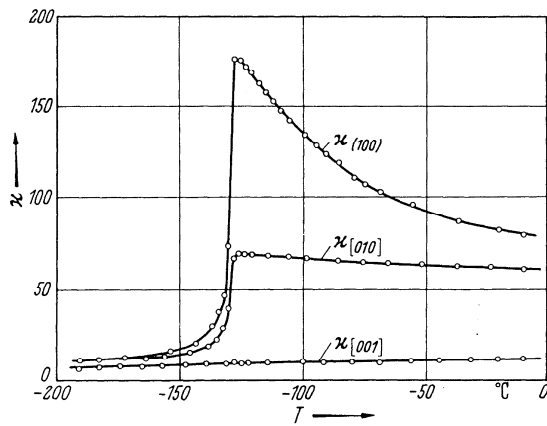


Fig. 31A-5-005. $\text{CsH}_3(\text{SeO}_3)_2$. κ vs. T ($f = 10 \text{ kHz}$, $E = 500 \text{ V m}^{-1}$) [65Mak]. See Fig. 31A-5-006.

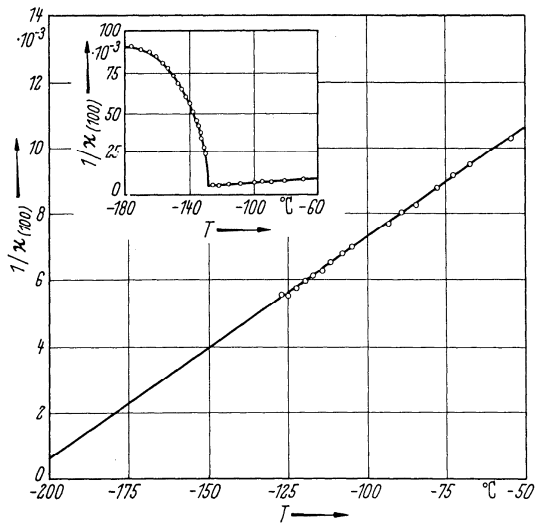


Fig. 31A-5-006. $\text{CsH}_3(\text{SeO}_3)_2$. $1/\kappa_{(100)}$ vs. T ($f = 10 \text{ kHz}$, $E = 500 \text{ V m}^{-1}$) [65Mak]. $\kappa_{(100)}$: dielectric constant perpendicular to the (100) plane.

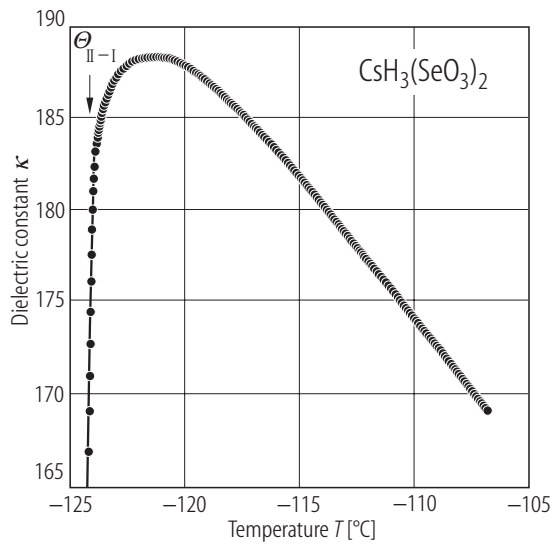


Fig. 31A-5-007. $\text{CsH}_3(\text{SeO}_3)_2$. κ vs. T near $\Theta_{\text{II-I}}$ [85Kom]. κ : dielectric constant perpendicular to the (100) plane.

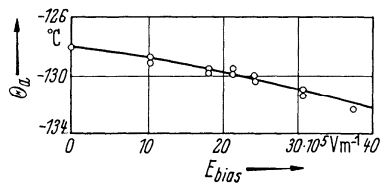


Fig. 31A-5-008. $\text{CsH}_3(\text{SeO}_3)_2$. Θ_{II} vs. E_{bias} [65Mak].

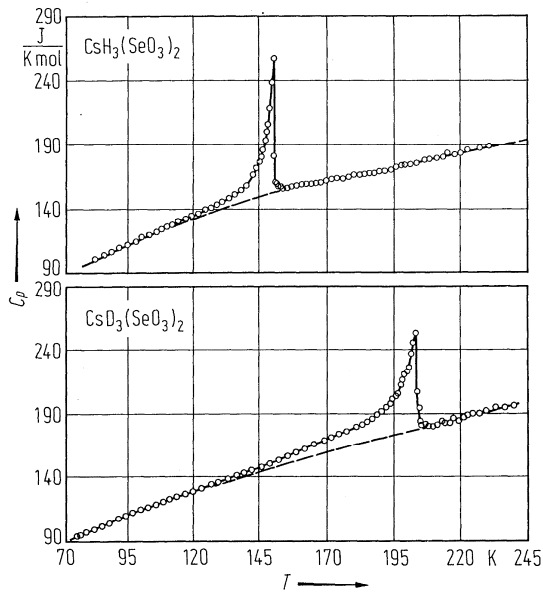


Fig. 31A-5-009. $\text{CsH}_3(\text{SeO}_3)_2$, $\text{CsD}_3(\text{SeO}_3)_2$. C_p vs. T [79Osa]. C_p : molar heat capacity at constant pressure.

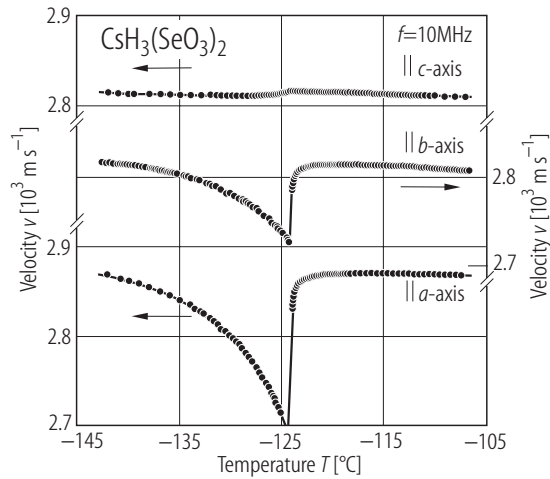


Fig. 31A-5-010. $\text{CsH}_3(\text{SeO}_3)_2$. v vs. T [85Kom]. v : velocities of the longitudinal sound propagated along the a , b and c axes.

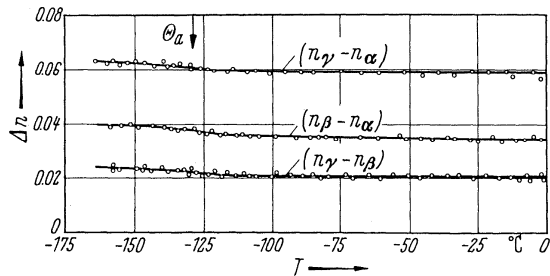


Fig. 31A-5-011. $\text{CsH}_3(\text{SeO}_3)_2$. Δn vs. T [65Mak].

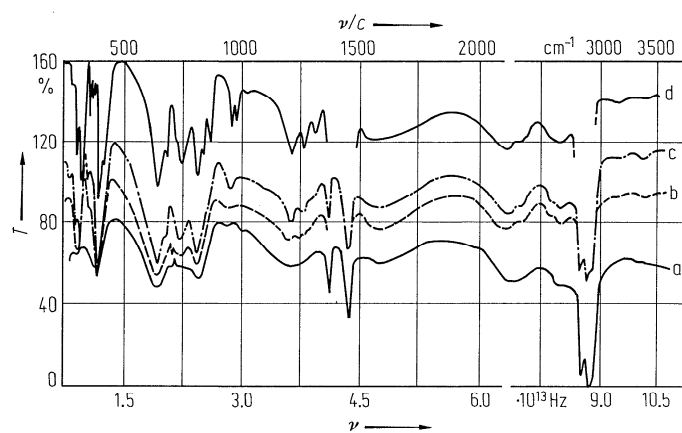


Fig. 31A-5-012. $\text{CsH}_3(\text{SeO}_3)_2$. Transmission T vs. ν [66Kha]. Parameter: T . a: $\approx +25^\circ\text{C}$, b: $\approx -120^\circ\text{C}$, c: $\approx -140^\circ\text{C}$, d: $\approx -175^\circ\text{C}$. Note change of scale at $\nu = 6 \cdot 10^{13}$ Hz.

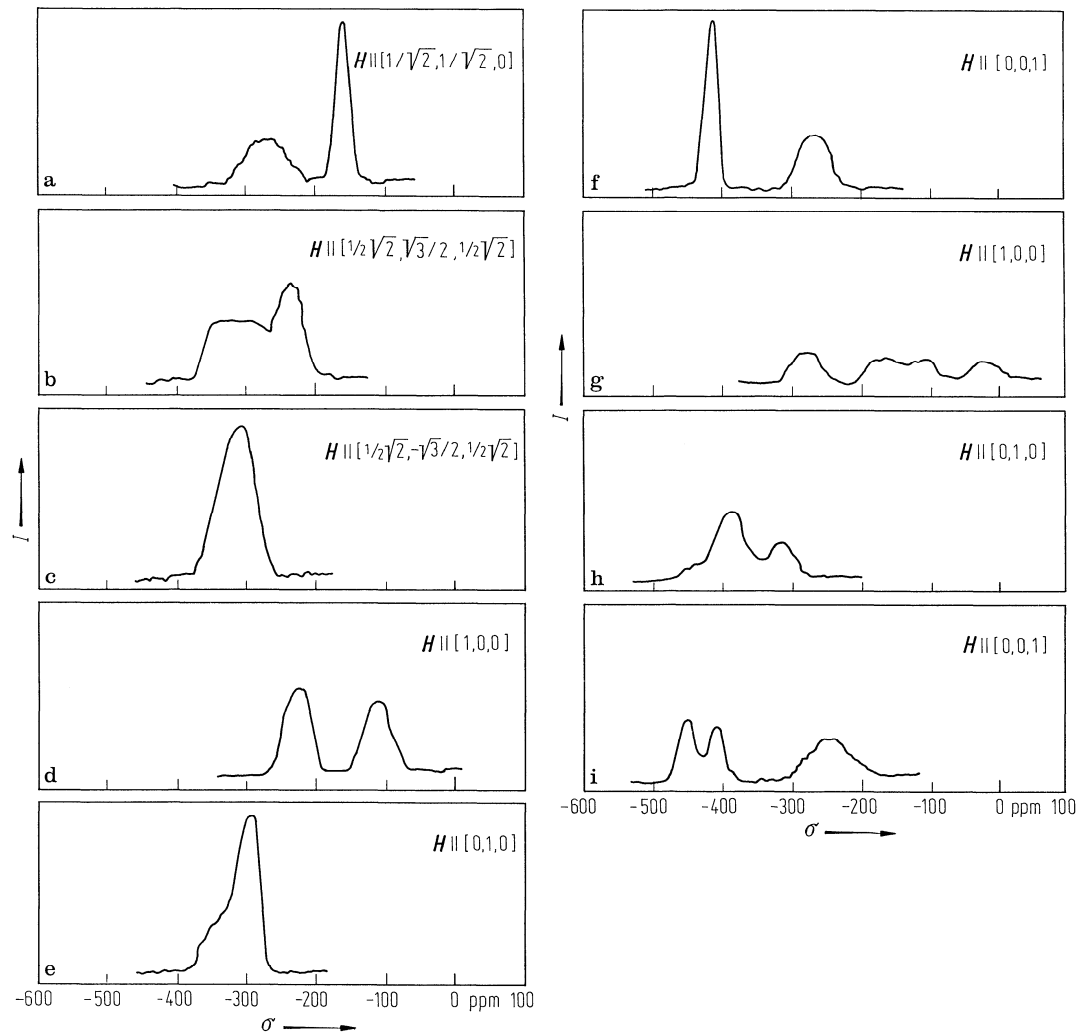


Fig. 31A-5-013. $\text{CsH}_3(\text{SeO}_3)_2$. ^{77}Se NMR high resolution spectra. (a)...(f) 20 °C. (g)...(i) -150 °C. Directions refer to the orthogonal system assigned to the crystallographic system as $X \parallel a$, $[XY] \parallel [ab]$ [82Kri]. $\nu_L = 60$ MHz. σ : ^{77}Se chemical shift, relative to liquid H_2SeO_4 .

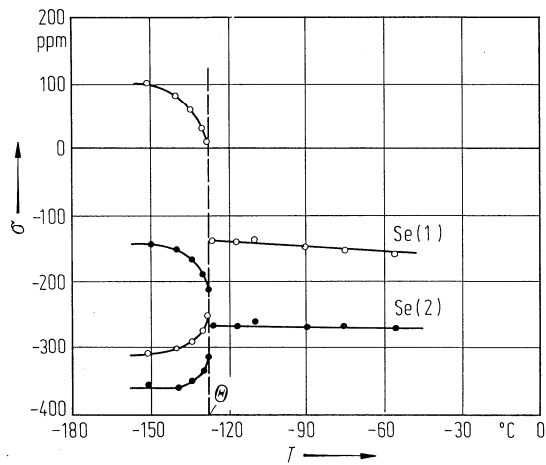


Fig. 31A-5-014. $\text{CsH}_3(\text{SeO}_3)_2$. σ vs. T [82Kri]. σ : ^{77}Se chemical shift. $H \perp Z$. $\angle(H, X) = 45^\circ$.

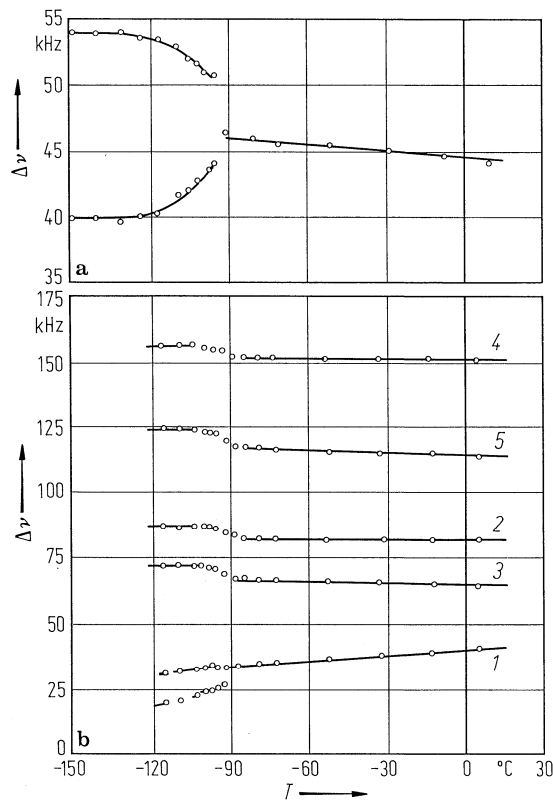


Fig. 31A-5-015. $\text{CsD}_3(\text{SeO}_3)_2$. $\Delta\nu$ vs. T [81Vin]. (a) $\Delta\nu$: quadrupole splitting of ^{133}Cs . $H \perp Y$. $\angle(H, Z) = 140^\circ$. (b) $\Delta\nu$: quadrupole splitting of ^2D . $H \perp X$. $\angle(H, Y) = 68^\circ$. $H = 13 \text{ kOe}$. Numerals 1, 2, 3, 4, 5 indicate the number of the quadrupole splittings.