

Fig. 33A-3-001. CsH_2PO_4 (CDP). Phase diagram [78Rap]. Dashed line: metastable extension.

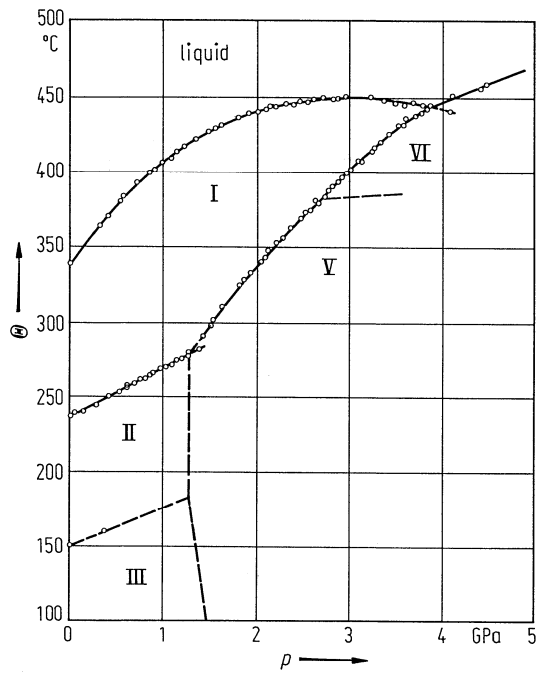


Fig. 33A-3-002. CsD_2PO_4 (DCDP). Phase diagram [81Kin].

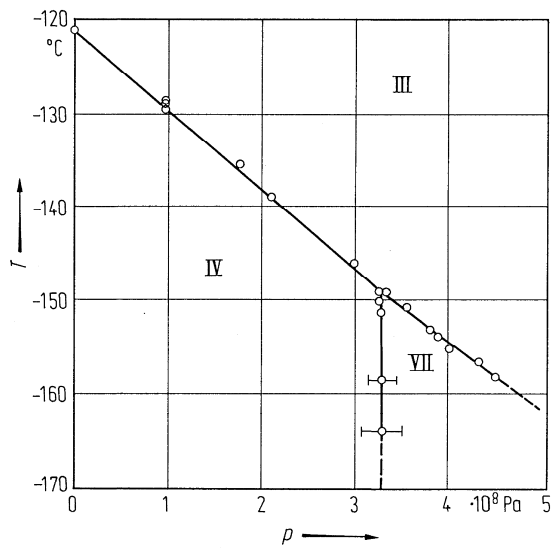


Fig. 33A-3-003. CsH_2PO_4 (CDP). Phase diagram [78Yas], see also [78Ges].

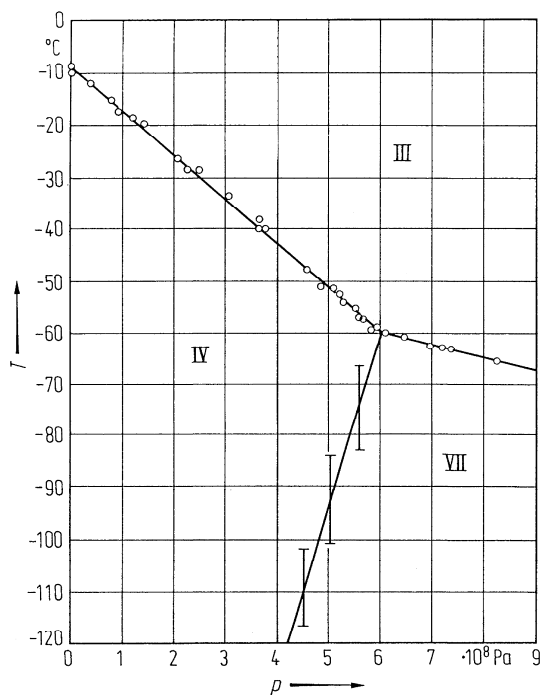


Fig. 33A-3-004. CsD_2PO_4 (DCDP). Phase diagram [78Ges]. Θ_f at $p = 0$ is -8.5°C .

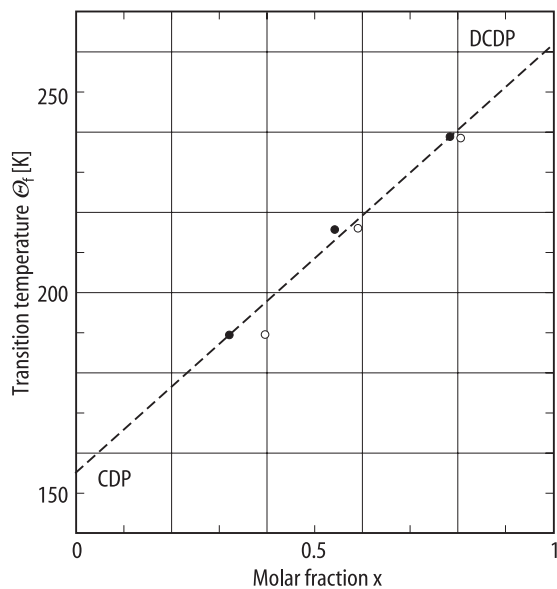


Fig. 33A-3-005. $\text{CsH}_{2(1-x)}\text{D}_{2x}\text{PO}_4$. Θ_f vs. x [94Iwa]. The deuteration rates of two crystallographically nonequivalent hydrogen bonds are determined by neutron diffraction. Open circle: H(1), full circle: H(2). H(1): hydrogen atom in the longer hydrogen bond connecting PO_4 group perpendicular to the b axis. H(2): hydrogen atom in the shorter hydrogen bond connecting PO_4 groups along the b axis. See Fig. 33A-3-009.

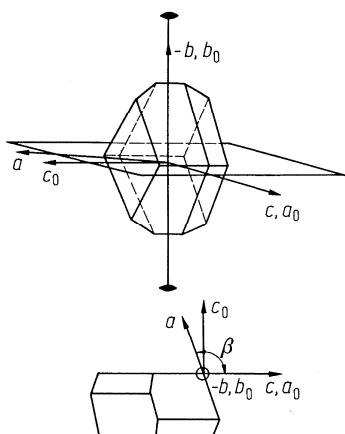


Fig. 33A-3-006. CsH_2PO_4 (CDP). Crystal form [76Ues]. a, b, c : crystallographic axes in monoclinic system; a_0, b_0, c_0 : those assigned as orthorhombic system in [52Fel] and those assigned as pseudo-orthorhombic system in [78Nel].

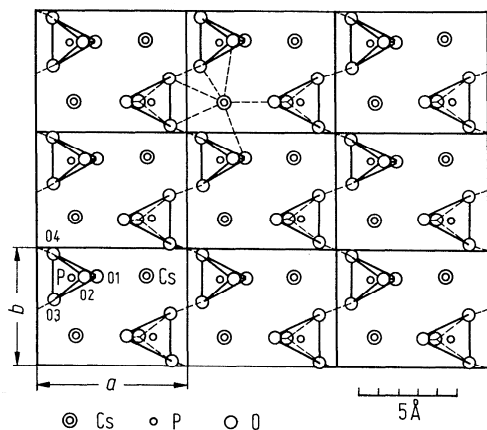


Fig. 33A-3-007. CsH_2PO_4 (CDP). Structure of phase III [76Ues]. Projection on (001) plane.

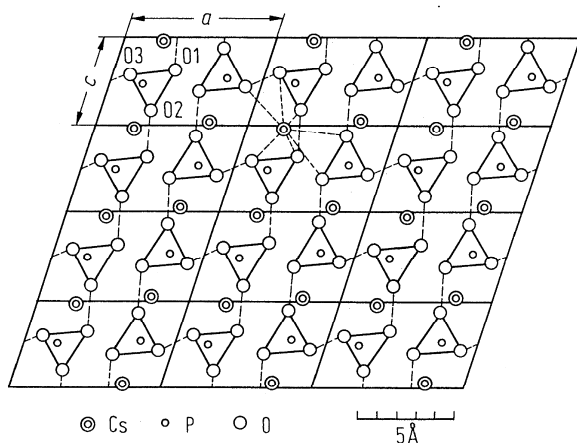


Fig. 33A-3-008. CsH_2PO_4 (CDP). Structure of phase III [76Ues]. Projection on (010) plane.

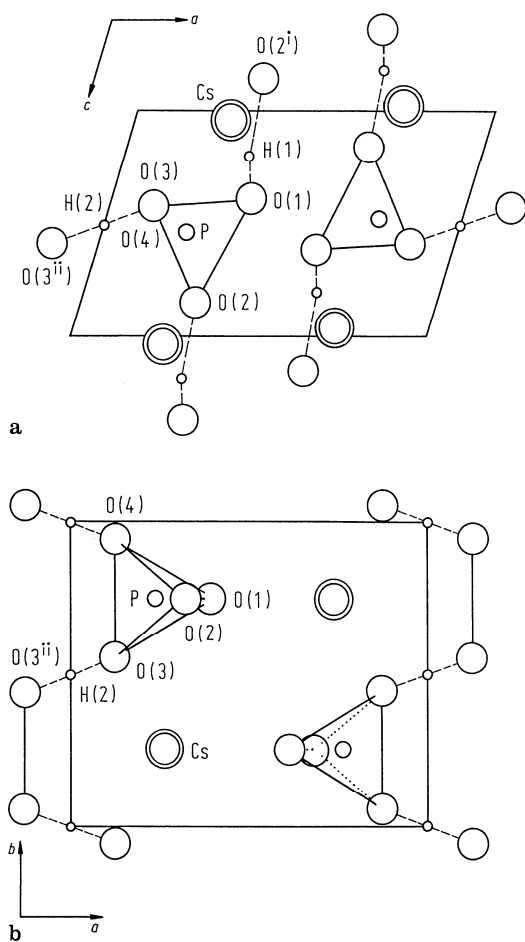


Fig. 33A-3-009. CsH_2PO_4 (CDP). Structure of phase III [80Mat]. **(a)** View along the b axis and **(b)** along the c axis.

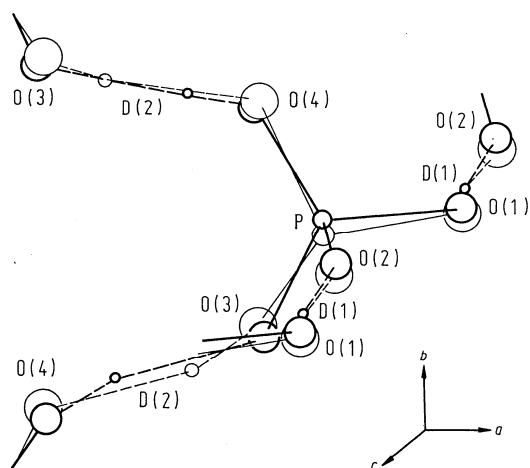


Fig. 33A-3-010. CsD_2PO_4 (DCDP). A view of the disordered structure in phase III [83Ito]. Thick and thin lines correspond to the two sets of the equilibrium configurations.

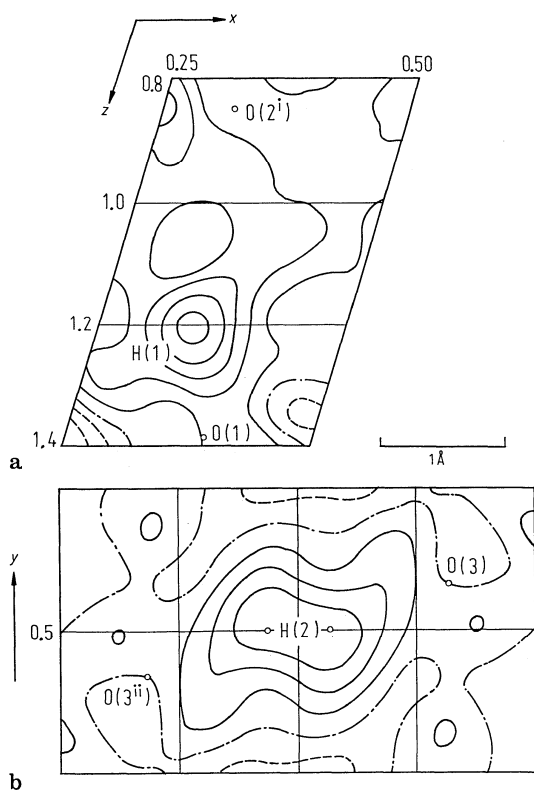


Fig. 33A-3-011. CsH_2PO_4 (CDP). Electron density map of H atoms at RT [80Mat]. The interval of contours is $0.2 \text{ e}\text{\AA}^{-3}$ (a) around H(1), (b) around H(2).

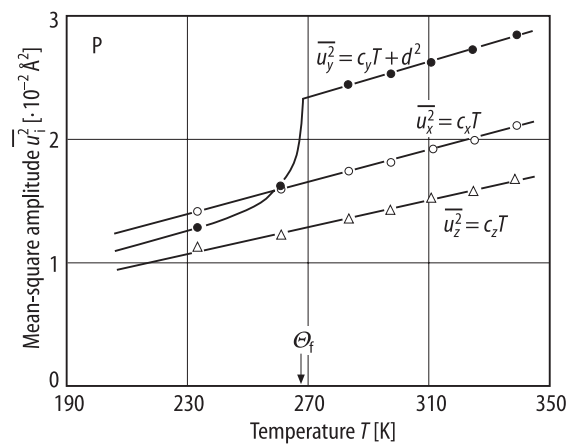


Fig. 33A-3-012. CsD_2PO_4 (DCDP). $\overline{u_i^2}$ vs. T for P atom [83Ito]. $\overline{u_i^2}$ ($i = x, y, z$): mean-square thermal amplitude. c_x, c_y, c_z, d : fitting parameters for the data above Θ_f .

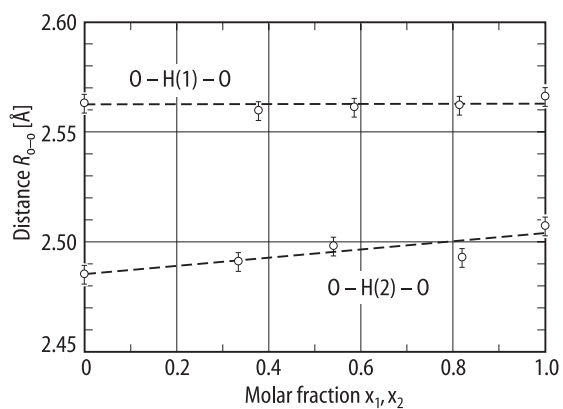


Fig. 33A-3-013. $\text{CsH}_{2(1-x)}\text{D}_{2x}\text{PO}_4$. $R_{\text{O-O}}$ vs. x_1, x_2 [94Iwa]. $T = 80$ K. $R_{\text{O-O}}$: O-O distance of the hydrogen bond. x_1, x_2 : deuteration rates of H(1), H(2) sites, respectively. H(1), H(2): see the caption of Fig. 33A-3-005.

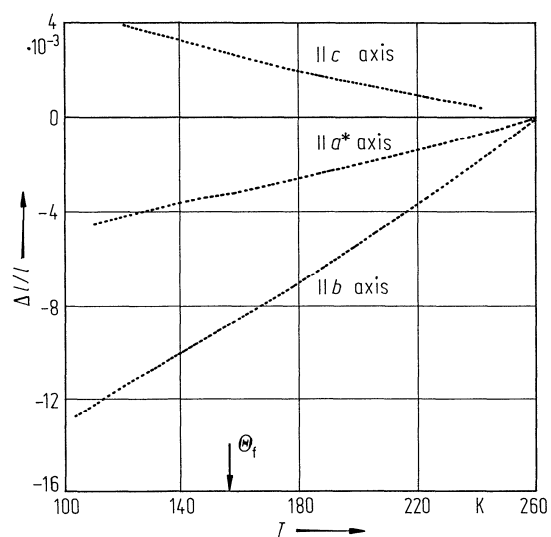


Fig. 33A-3-014. CsH_2PO_4 (CDP). $\Delta l/l$ vs. T [84Deg2]. $\Delta l/l$: linear thermal expansion.

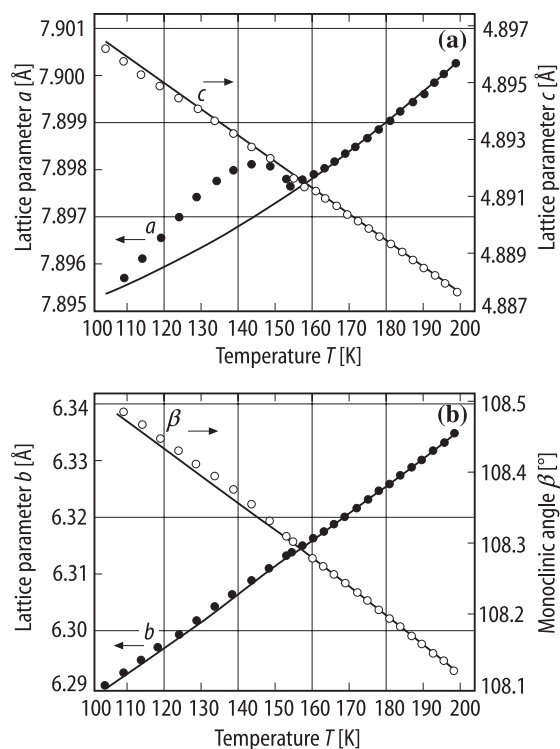


Fig. 33A-3-015. CsH_2PO_4 (CDP). a , b , c , β vs. T from 100 K to 200 K [93Bro]. (a) a , c . (b) b , β . Full line: calculated values by means of polynomial approximation for the data above Θ_I .

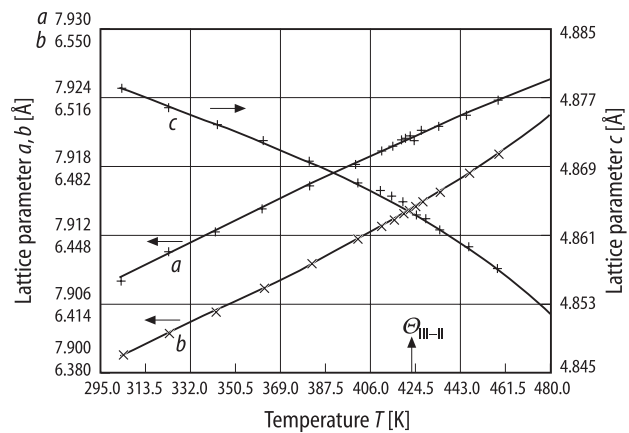


Fig. 33A-3-016. CsH_2PO_4 (CDP). a , b , c vs. T above RT [90Bro].

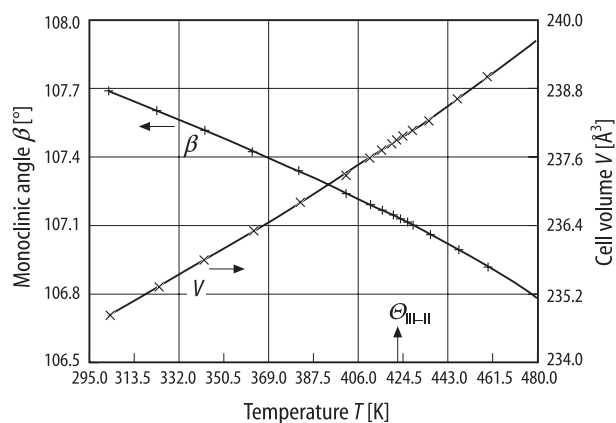


Fig. 33A-3-017. CsH_2PO_4 (CDP). β , V vs. T above RT [90Bro]. β : monoclinic angle. V : volume of unit cell.

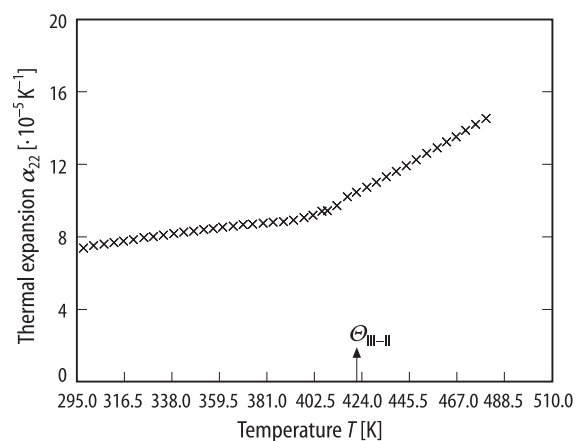


Fig. 33A-3-018. CsH_2PO_4 (CDP). α_{22} vs. T above RT [90Bro]. α_{22} : linear thermal expansion coefficient.

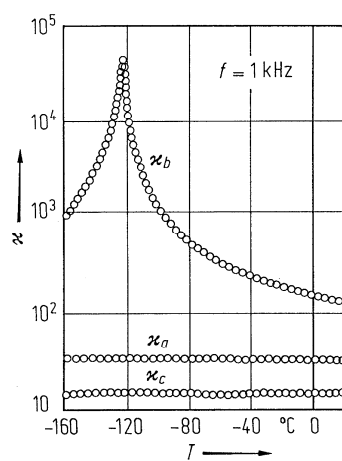


Fig. 33A-3-019. CsH_2PO_4 (CDP). κ_a , κ_b , κ_c vs. T [76Ues]. $f = 1$ kHz.

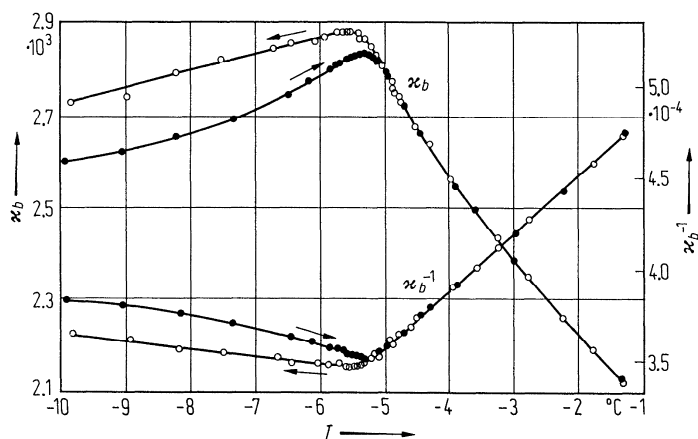


Fig. 33A-3-020. CsD_2PO_4 (DCDP). κ_b , κ_b^{-1} vs. T [75Lev]. Deuteration degree is more than 90%. $f = 1$ kHz.

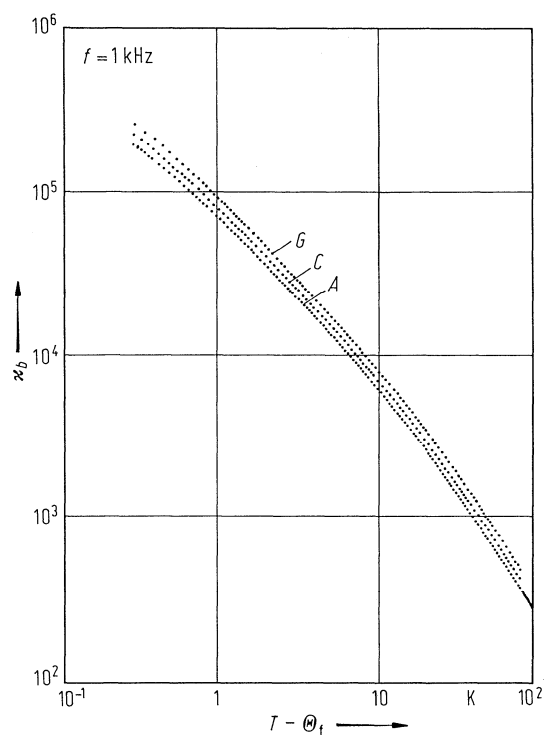


Fig. 33A-3-021. $\text{CsH}_{2(1-x)}\text{D}_{2x}\text{PO}_4$. κ_b vs. $T - \Theta_f$ at 1 kHz [82Deg]. A: $x = 0$, C: $x = 0.14$, G: $x = 0.98$. Relation between Θ_f and x : see the caption of Fig. 33A-3-022.

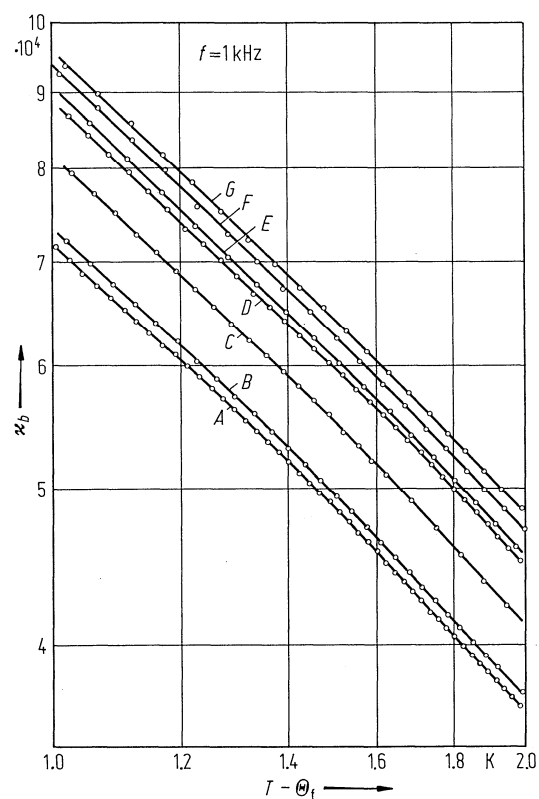


Fig. 33A-3-022. $\text{CsH}_{2(1-x)}\text{D}_{2x}\text{PO}_4$. κ_b vs. $T - \Theta_f$ at 1 kHz [82Deg]. Curve A: $x = 0$, $\Theta_f = 156.0$ K; B: 0.03, 159.3 K; C: 0.14, 172.0 K; D: 0.27, 186.6 K; E: 0.48, 211.4 K; F: 0.65, 230.9 K; G: 0.98, 268.3 K.

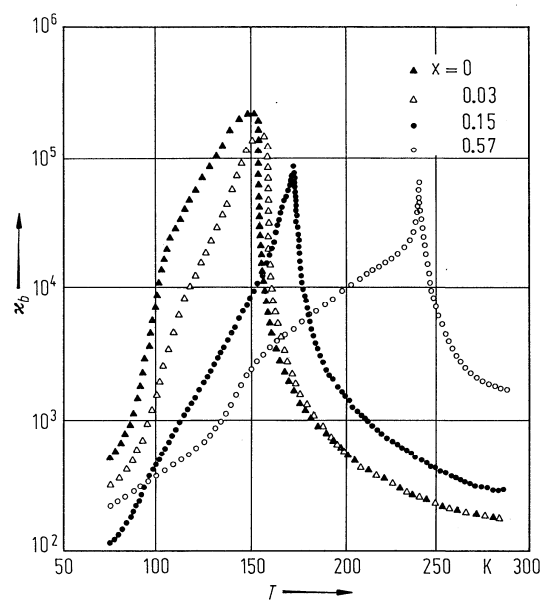


Fig. 33A-3-023. $\text{CsH}_{2(1-x)}\text{D}_{2x}\text{PO}_4$. κ_b vs. T [80Bar]. Parameter: x .

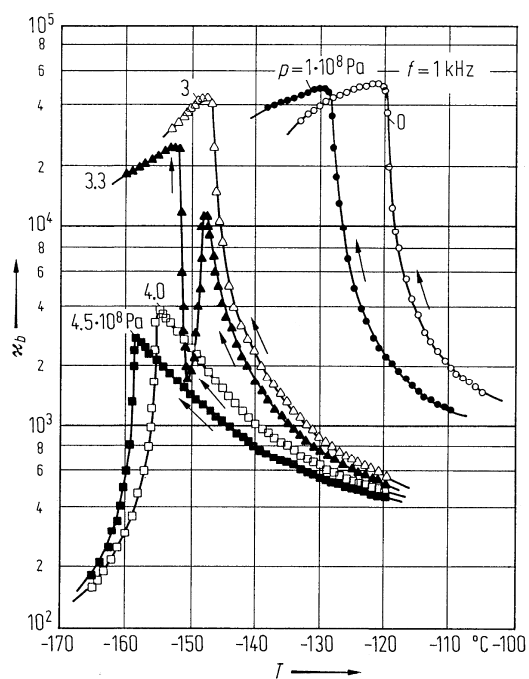


Fig. 33A-3-024. CsH_2PO_4 (CDP). κ_b vs. T [78Yas]. Parameter: p .

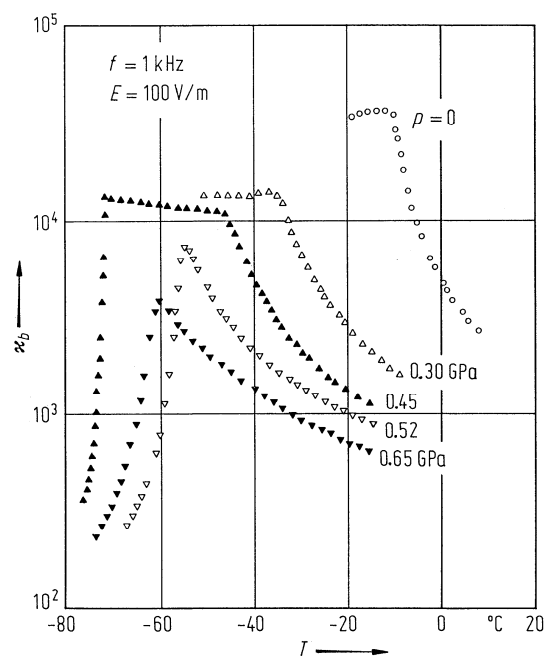


Fig. 33A-3-025. CsD_2PO_4 (DCDP). κ_b vs. T [79Yas1]. Parameter: p .

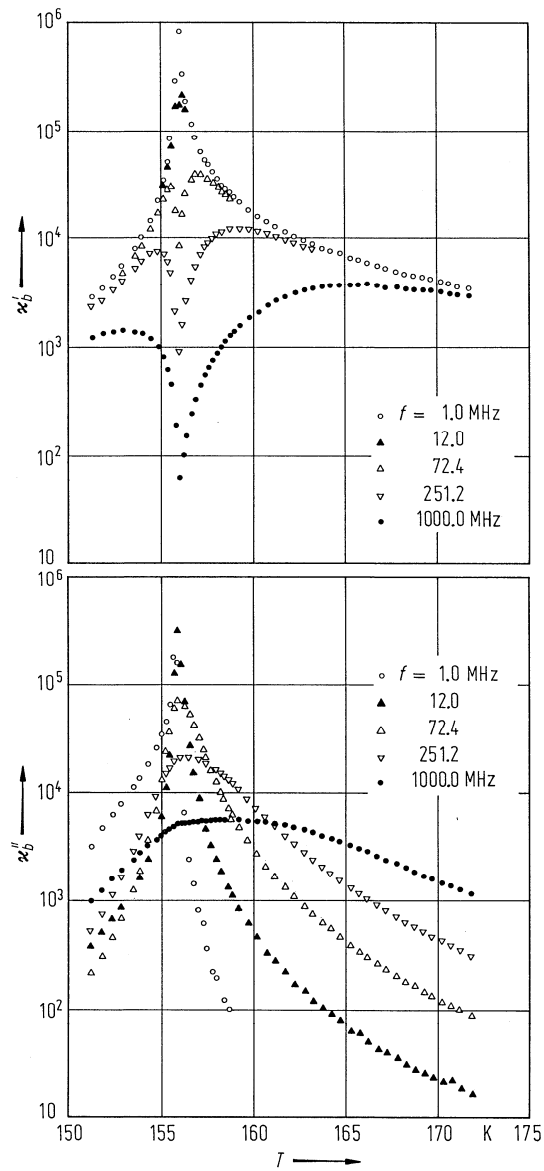


Fig. 33A-3-026. CsH₂PO₄ (CDP). κ'_b , κ''_b vs. T [82Deg]. Parameter: f .

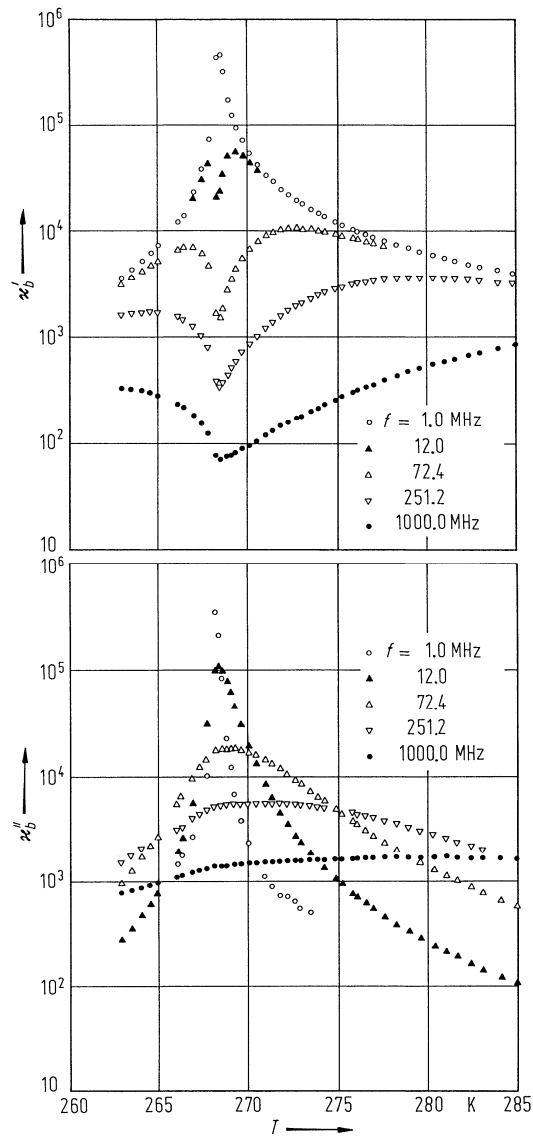


Fig. 33A-3-027. CsD₂PO₄ (DCDP). κ'_b , κ''_b vs. T [82Deg]. Parameter: f . Deuteration rate: 0.97.

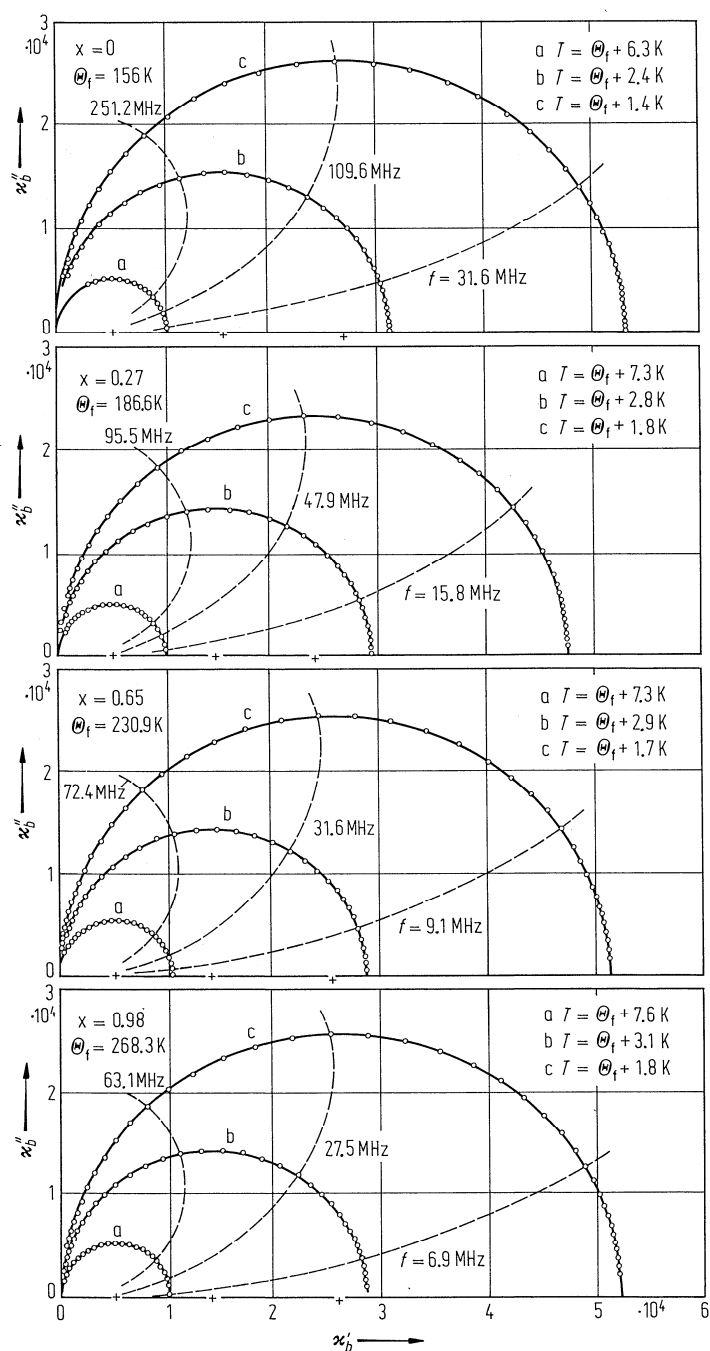


Fig. 33A-3-028. CsH₂(1-x)D_{2x}PO₄. κ'_b vs. κ''_b (Cole-Cole diagram) above Θ_f [82Deg]. Parameters: x , T . Plus sign: centers of circular arcs.

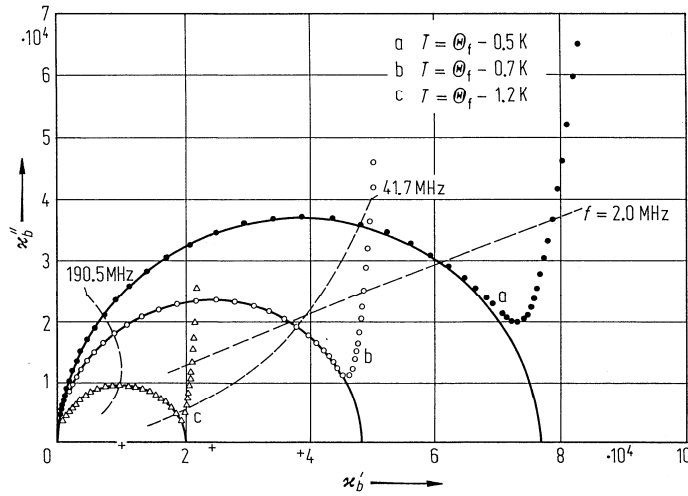


Fig. 33A-3-029. CsH₂PO₄ (CDP). κ'_b vs. κ''_b (Cole-Cole diagram) below Θ_f [82Deg]. Parameter: T . Plus sign: centers of circular arcs.

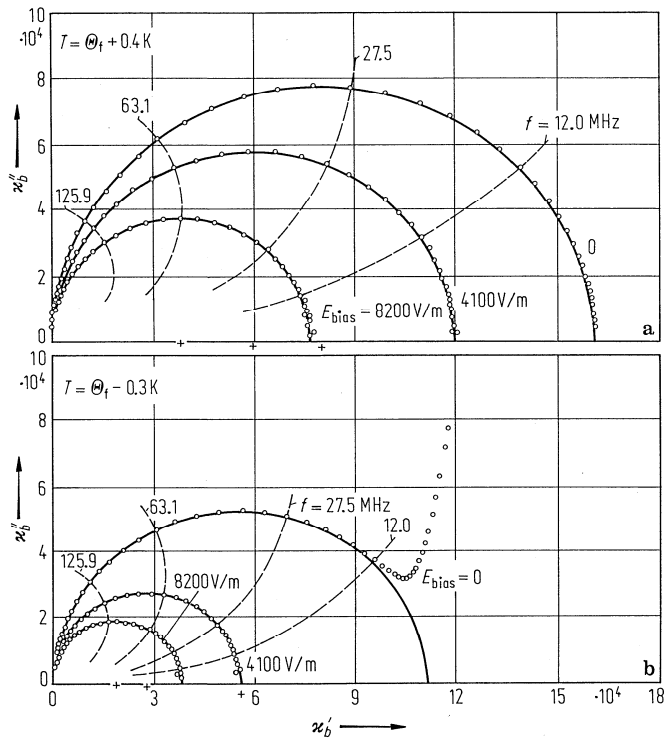


Fig. 33A-3-030. CsH₂PO₄ (CDP). κ'_b vs. κ''_b (Cole-Cole diagram) [82Deg]. Parameter: E_{bias} . E_{bias} : dc bias field. Plus sign: centers of circular arcs. (a) $T = \Theta_f + 0.4$ K, (b) $T = \Theta_f - 0.3$ K.

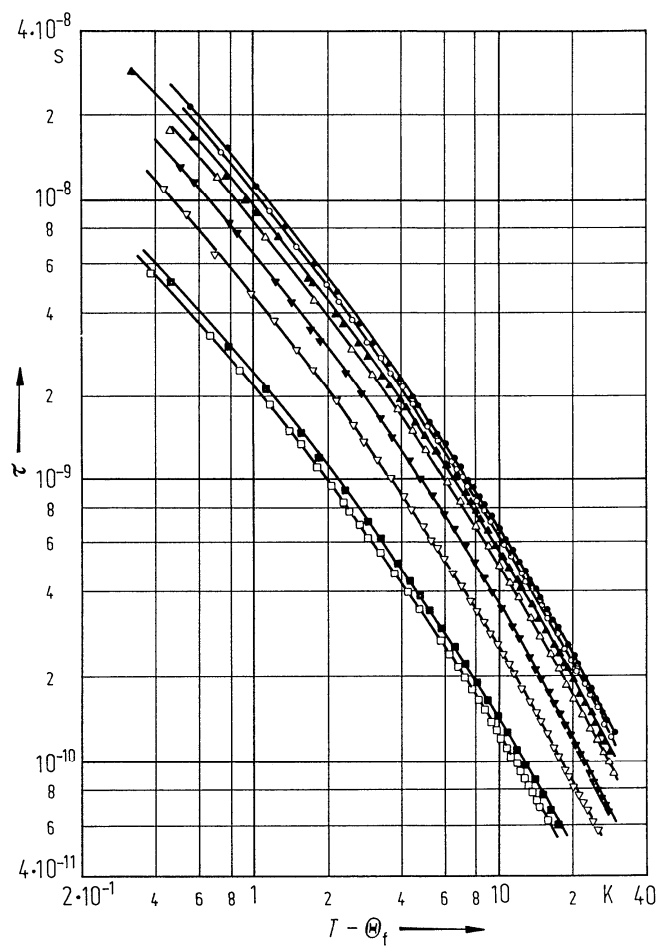


Fig. 33A-3-031. CsH_{2(1-x)}D_{2x}PO₄. τ vs. $T - \Theta_f$ [82Deg]. Parameter: x . τ : relaxation time of dielectric dispersion.

	open square	full square	open downside triangle	full downside triangle	open upside triangle	full upside triangle	open circle	full circle
x	0	0.03	0.14	0.27	0.48	0.65	0.82	0.98
Θ_f [K]	156.0	159.3	172.0	186.6	211.4	230.9	249.8	268.3

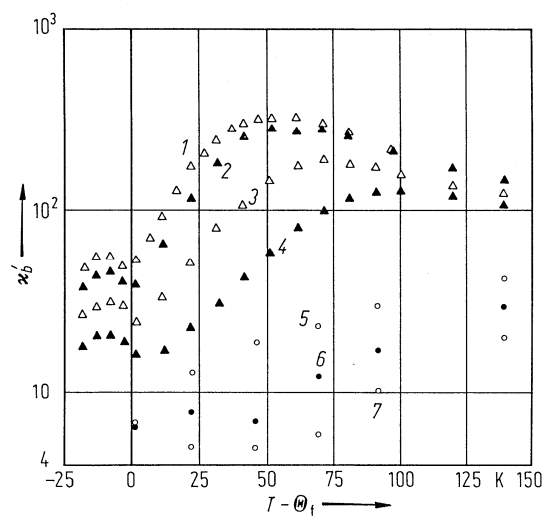


Fig. 33A-3-032. $\text{CsH}_{2(1-x)}\text{D}_{2x}\text{PO}_4$. κ'_b vs. $T - \Theta_f$ [86Lev]. Parameter: f : 1: 18.7 GHz, 2: 22.5 GHz, 3: 30.7 GHz, 4: 45.0 GHz, 5: 189.0 GHz, 6: 278.9 GHz, 7: 375 GHz; 1...4: $x = 0$; 5...7: $x = 0.03$.

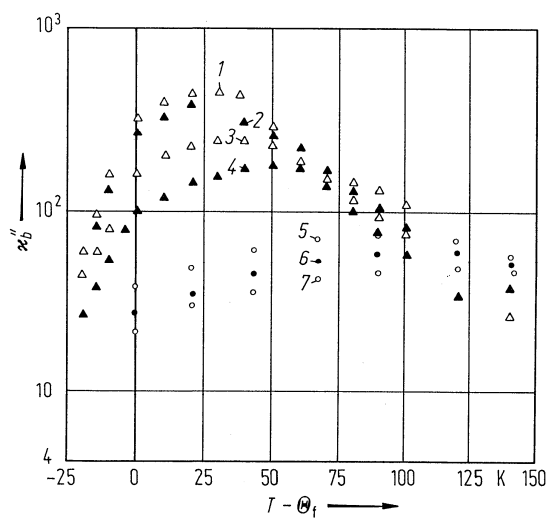


Fig. 33A-3-033. $\text{CsH}_{2(1-x)}\text{D}_{2x}\text{PO}_4$. κ''_b vs. $T - \Theta_f$ [86Lev]. Parameter: f . Symbols are the same as in Fig. 33A-3-032.

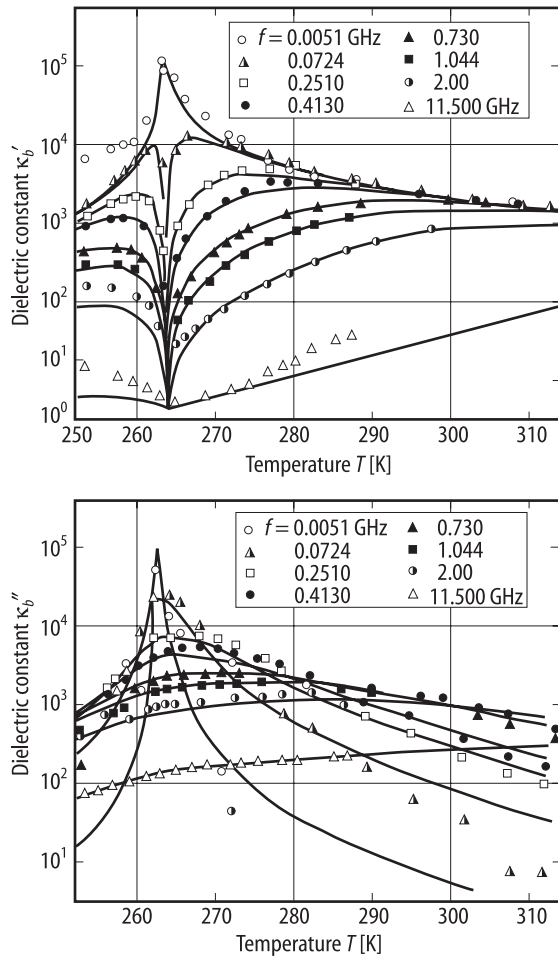


Fig. 33A-3-034. CsD₂PO₄ (DCDP). κ'_b , κ''_b vs. T [88Gri]. Parameter: f .

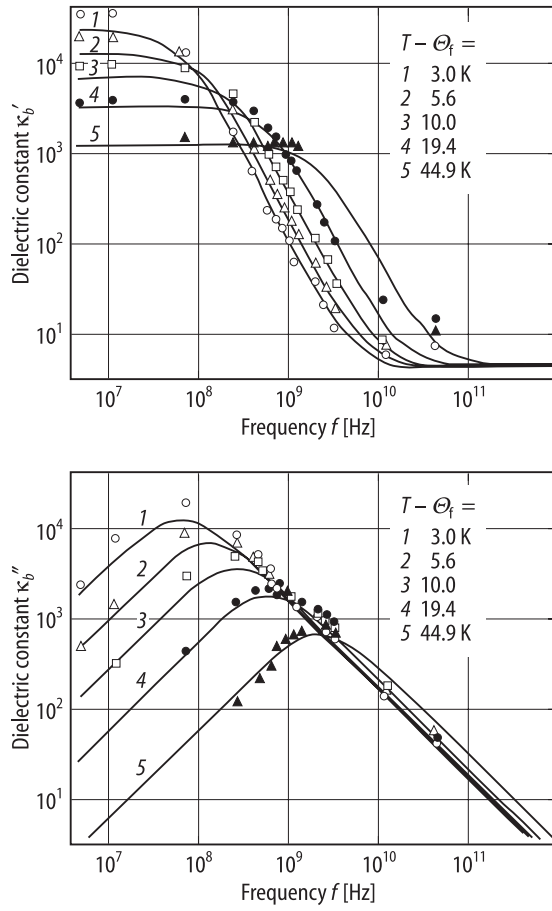


Fig. 33A-3-035. CsD₂PO₄ (DCDP). κ'_b , κ''_b vs. f [88Gri]. Parameter: $T - \Theta_f$.

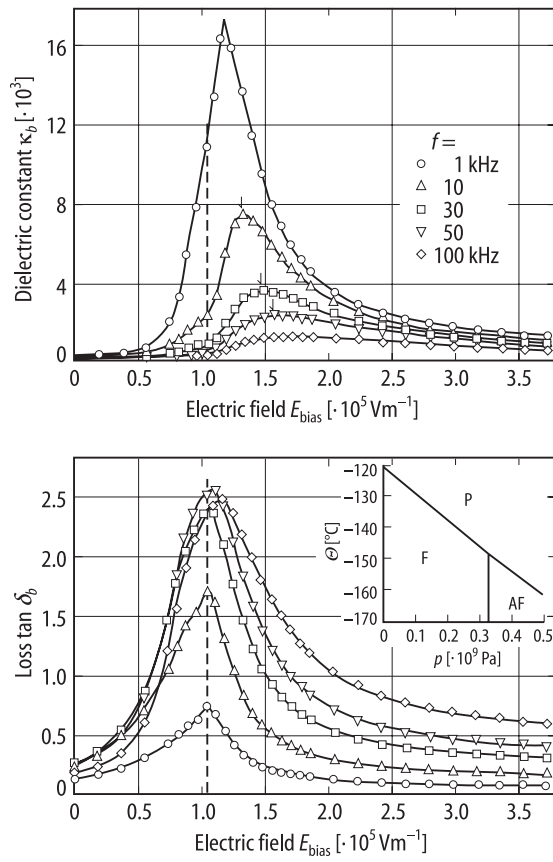


Fig. 33A-3036. CsH_2PO_4 (CDP). κ_b , $\tan \delta_b$ vs. E_{bias} at $T = -170^\circ\text{C}$, $p = 0.45 \text{ GPa}$ [90Yas]. Parameter: f . Insert shows Θ vs. p phase diagram.

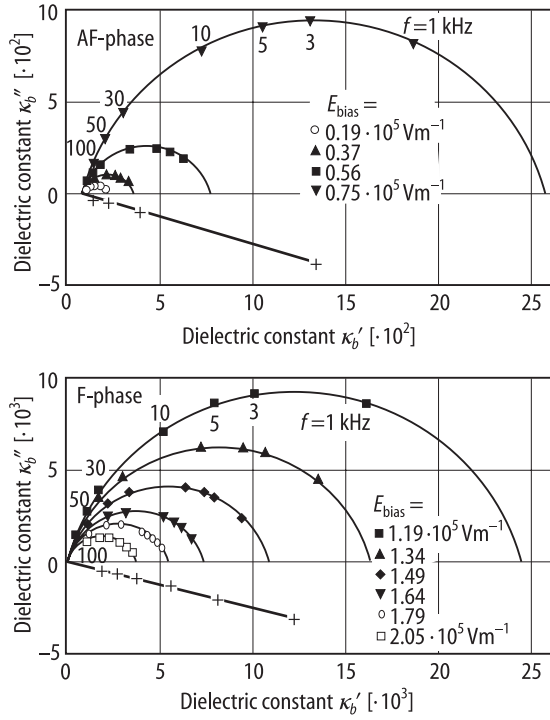


Fig. 33A-3037. CsH₂PO₄ (CDP). κ''_b vs. κ'_b (Cole-Cole diagram) [90Yas]. Parameter: E_{bias} , $T = -170^\circ\text{C}$, $p = 0.45\text{ GPa}$. Plus sign: centers of arcs.

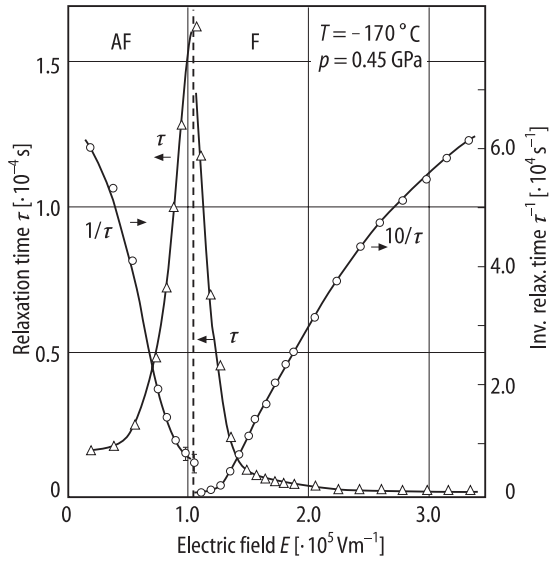


Fig. 33A-3038. CsH₂PO₄ (CDP). τ , $1/\tau$ vs. E [90Yas]. τ : dielectric relaxation time. $T = -170^\circ\text{C}$, $p = 0.45\text{ GPa}$.

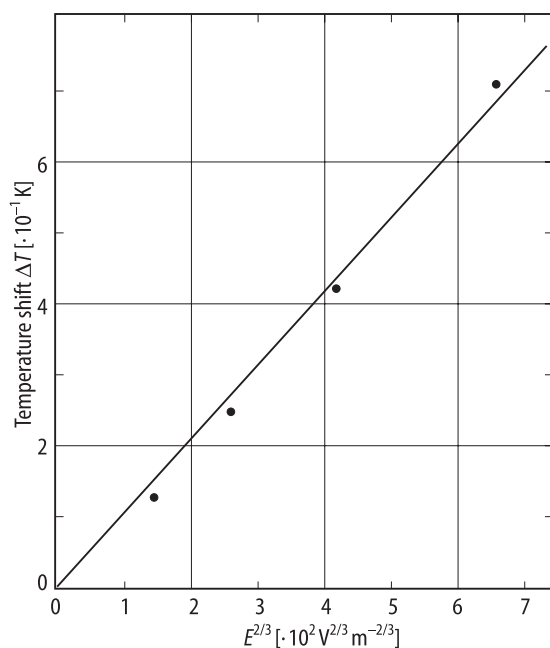


Fig. 33A-3-039. CsH₂PO₄ (CDP). ΔT vs. $E^{2/3}$ [93Ani]. $\Delta T = T_{\text{max}} - \Theta$. T_{max} : temperature of maximum dielectric constant.

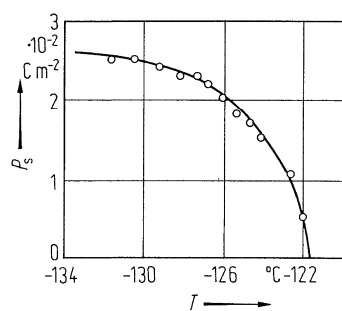


Fig. 33A-3-040. CsH₂PO₄ (CDP). P_s vs. T [76Ues].

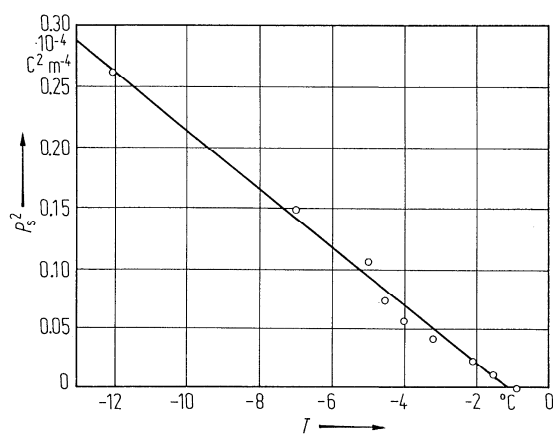


Fig. 33A-3-041. CsD₂PO₄ (DCDP). P_s^2 vs. T [75Lev].

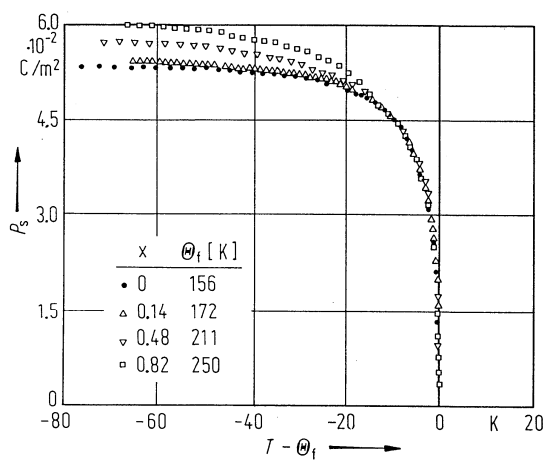


Fig. 33A-3-042. $\text{CsH}_{2(1-x)}\text{D}_{2x}\text{PO}_4$. P_s vs. $T - \theta_f$ [82Deg]. Parameter: x .

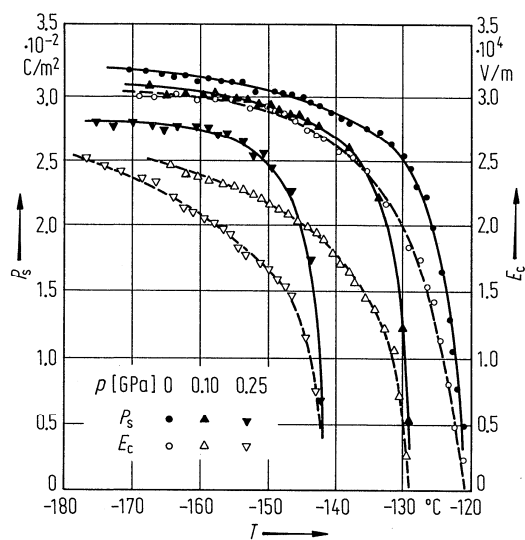


Fig. 33A-3-043. CsH_2PO_4 (CDP). P_s , E_c vs. T [79Yas1]. Parameter: p .

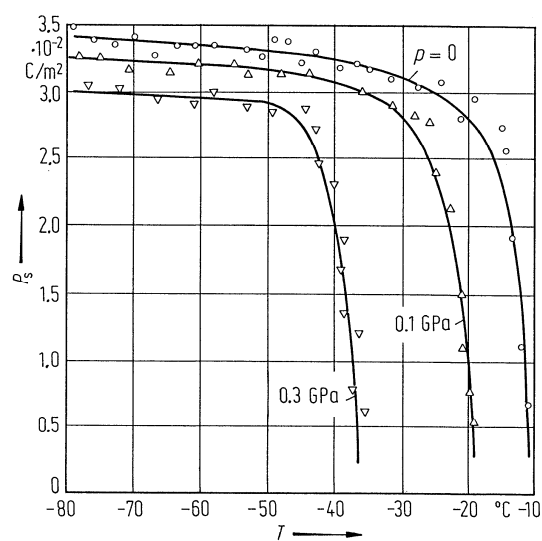


Fig. 33A-3-044. CsD_2PO_4 (DCDP). P_s vs. T [79Yas1]. Parameter: p .

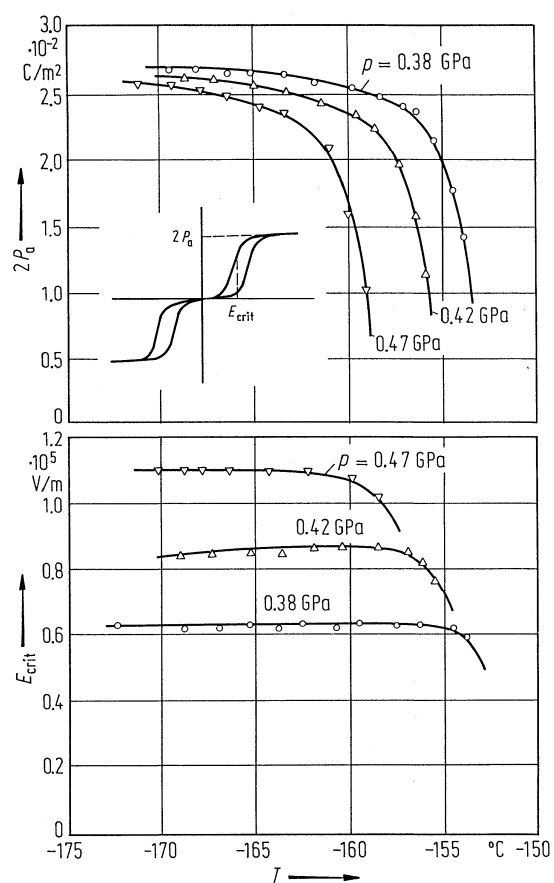


Fig. 33A-3-045. CsH_2PO_4 (CDP). $2P_a$, E_{crit} vs. T in the antiferroelectric phase VII [79Yas1]. Parameter: p . P_a : sublattice polarization, E_{crit} : critical field.

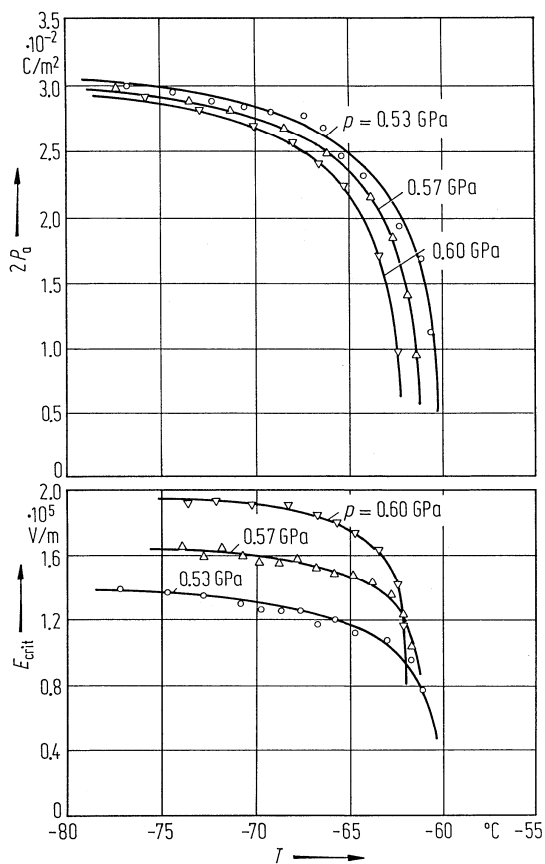


Fig. 33A-3-046. CsD_2PO_4 (DCDP). $2P_a$, E_{crit} vs. T in the antiferroelectric phase VII [79Yas1]. Parameter: p . P_a : sublattice polarization, E_{crit} : critical field. See inset of Fig. 33A-3-045.

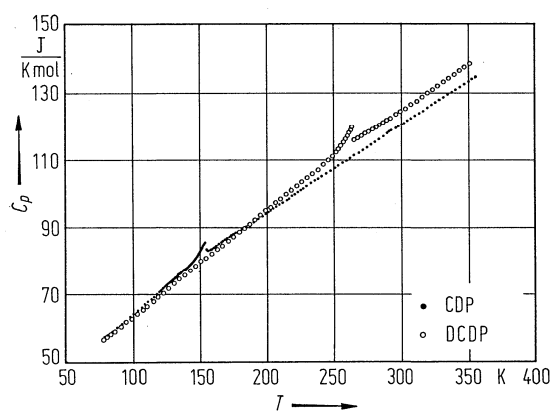


Fig. 33A-3-047. CsH_2PO_4 (CDP), CsD_2PO_4 (DCDP). C_p vs. T [83Ima]. C_p : molar heat capacity at constant pressure.

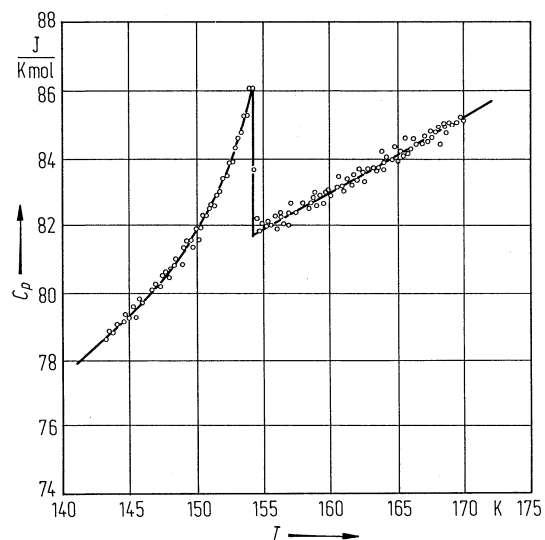


Fig. 33A-3-048. CsH_2PO_4 (CDP). C_p vs. T near Θ_f [831ma]. C_p : molar heat capacity at constant pressure.

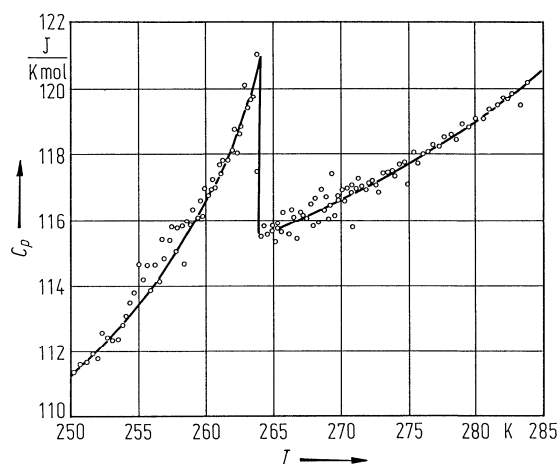


Fig. 33A-3-049. CsD_2PO_4 (DCDP). C_p vs. T near Θ_f [831ma]. C_p : molar heat capacity at constant pressure.

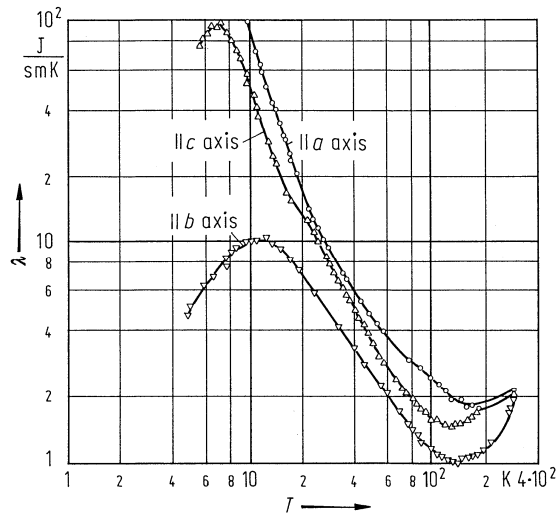


Fig. 33A-3-050. CsH_2PO_4 (CDP). λ vs. T [84Spo]. λ : thermal conductivity.

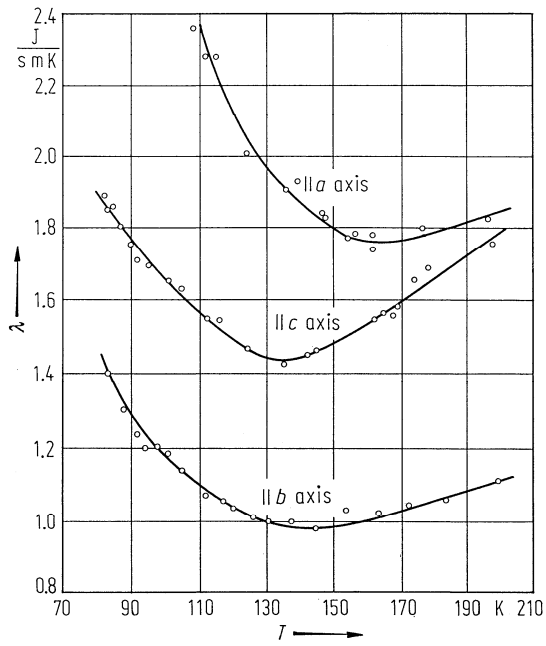


Fig. 33A-3-051. CsH_2PO_4 (CDP). λ vs. T near Θ_f [84Spo]. λ : thermal conductivity.

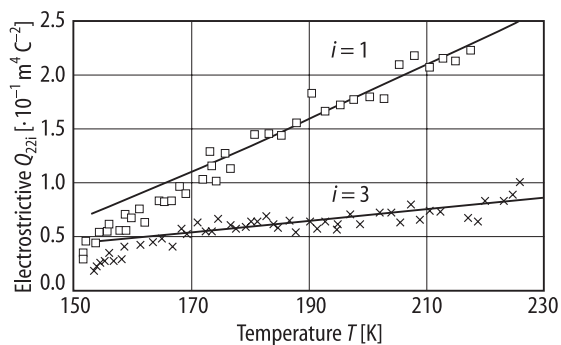


Fig. 33A-3-052. CsH₂PO₄ (CDP). Q_{22i} vs. T [90Sor]. Q_{22i} : electrostrictive constant measured by piezoelectric resonance method.

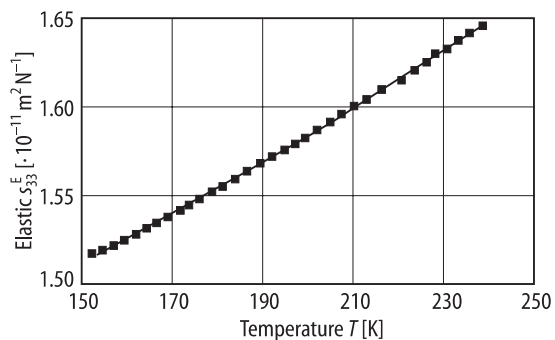
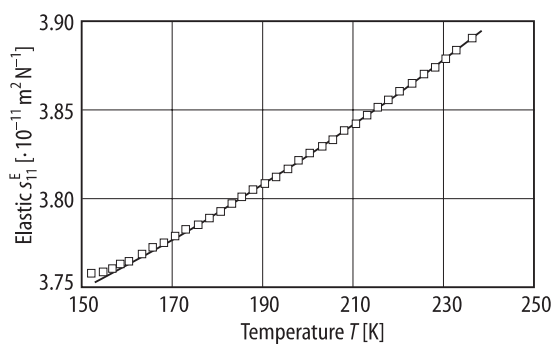


Fig. 33A-3-053. CsH₂PO₄ (CDP). s_{11}^E, s_{33}^E vs. T [90Sor]. s_{11}^E, s_{33}^E : elastic compliances measured by piezoelectric resonance method.

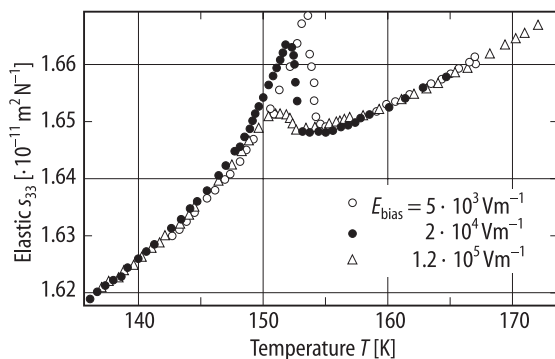


Fig. 33A-3-054. CsH₂PO₄ (CDP). s_{33} vs. T [88Sor]. Parameter: E_{bias} .

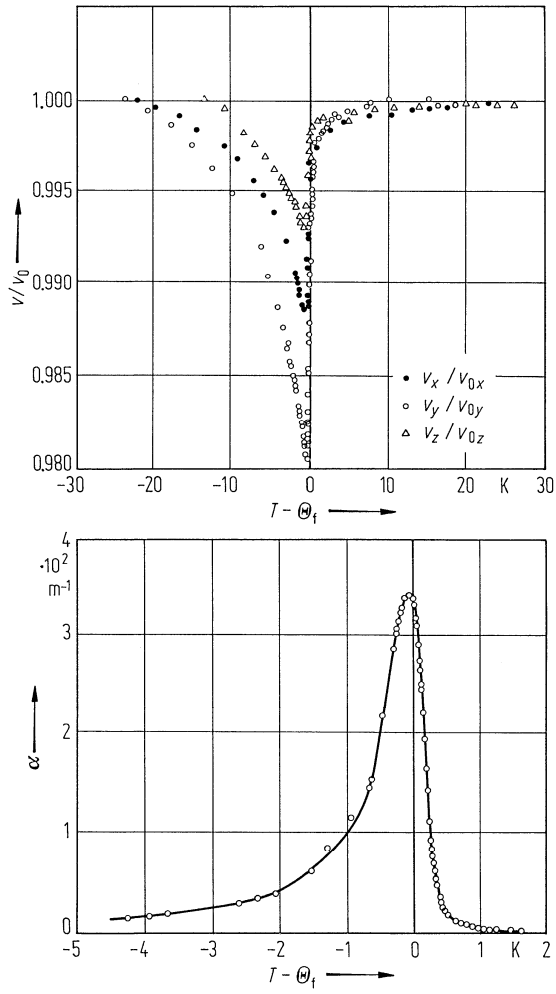


Fig. 33A-3-055. CsH₂PO₄ (CDP). v/v_0 , α vs. $T - \Theta_f$ for longitudinal sound wave [81Yak]. $f = 10$ MHz. v_x/v_{0x} , v_y/v_{0y} , v_z/v_{0z} : relative sound velocities propagating along the a^* , b , c axes, respectively ($a^* \parallel b \times c$). α : absorption coefficient of the sound wave propagating along the b axis.

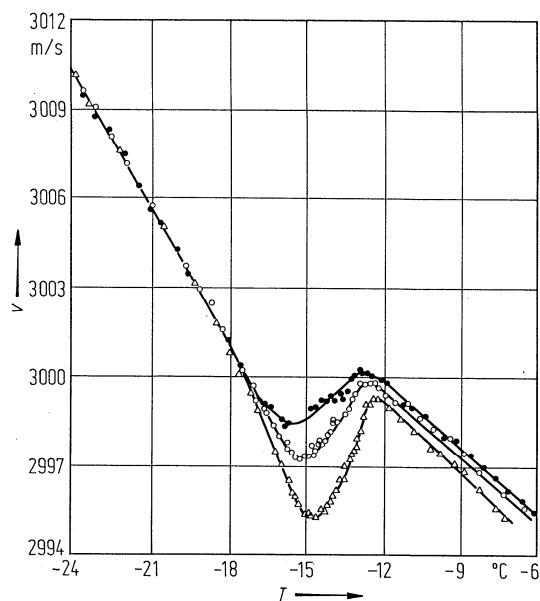


Fig. 33A-3-056. CsD_2PO_4 (DCDP). v vs. T [82Kas]. Parameter: f : v : velocity of longitudinal sound wave propagating along the a^* axis ($a^* \parallel b \times c$). Open upside triangle: 10 MHz, open circle: 30 MHz, full circle: 50 MHz.

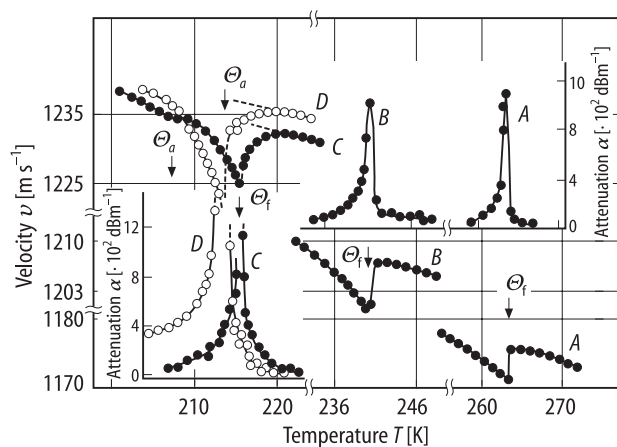


Fig. 33A-3-057. CsD_2PO_4 (DCDP). v , α vs. T [94Kit]. Parameter: p , $f = 10$ MHz. v , α : velocity and attenuation of quasi-transverse elastic wave with displacement along $[100]$ propagating along $[001]$ direction. A: $p = 0.1$ MPa, B: 280 MPa, C: 550 MPa, D: 580 MPa.

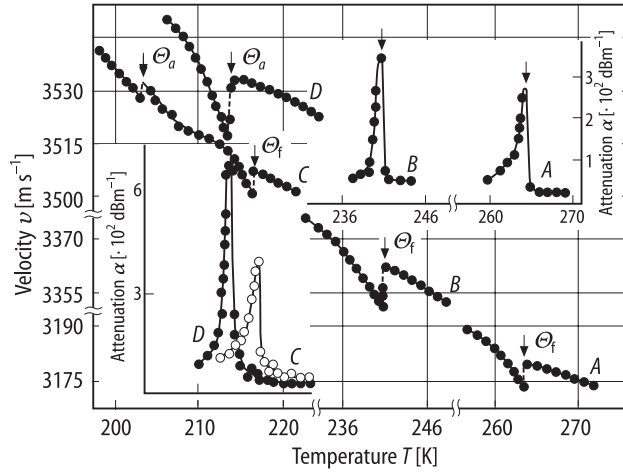


Fig. 33A-3-058. CsD₂PO₄ (DCDP). v , α vs. T [94Kit]. Parameter: p , $f=10$ MHz. v , α : velocity and attenuation of quasi-longitudinal elastic wave propagating along [100] direction. A: $p = 0.1$ MPa, B: 280 MPa, C: 540 MPa, D: 580 MPa.

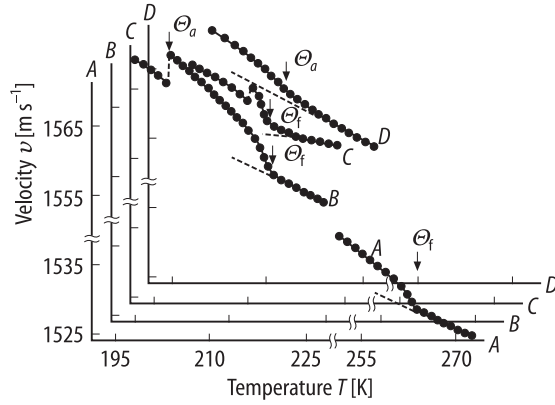


Fig. 33A-3-059. CsD₂PO₄ (DCDP). v vs. T [94Kit]. Parameter: p , $f=10$ MHz. v : velocity of transverse elastic wave with displacement along [101] propagating along [010] direction. A: $p = 0.1$ MPa, B: 530 MPa, C: 560 MPa, D: 580 MPa.

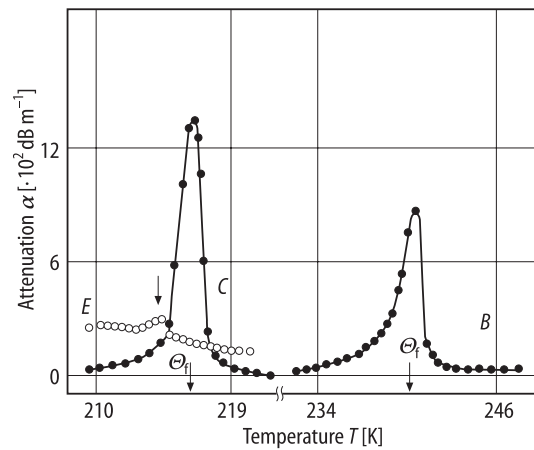
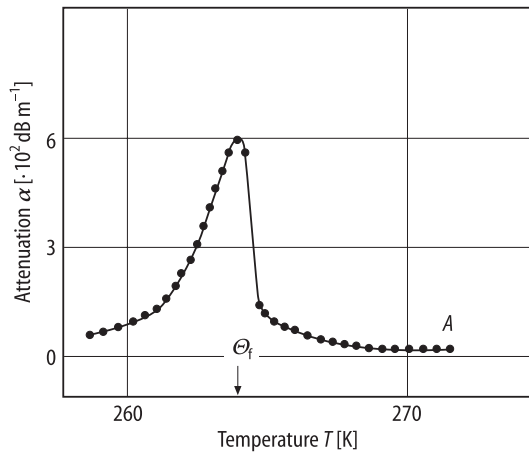


Fig. 33A-3-060. CsD₂PO₄ (DCDP). α vs. T [94Kit]. Parameter: p , $f=10$ MHz. α : attenuation of longitudinal elastic wave propagating along [010] direction. A: $p = 0.1$ MPa, B: 280 MPa, C: 540 MPa, E: 580 MPa.

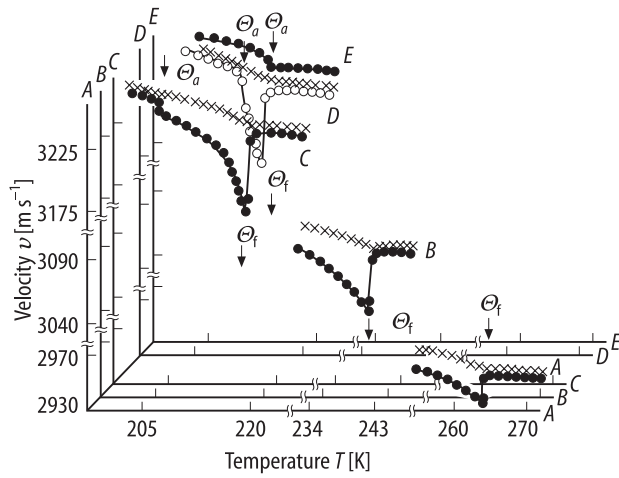


Fig. 33A-3-061. CsD₂PO₄ (DCDP). v vs. T [94Kit]. Parameter: p . $f = 10$ MHz. v : velocity of longitudinal elastic wave propagating along [010] direction. A : $p = 0.1$ MPa, B : 280 MPa, C : 540 MPa, D : 560 MPa, E : 580 MPa. Cross: velocity measured with applied electric field $E = 5 \cdot 10^3$ V m⁻¹ along [010].

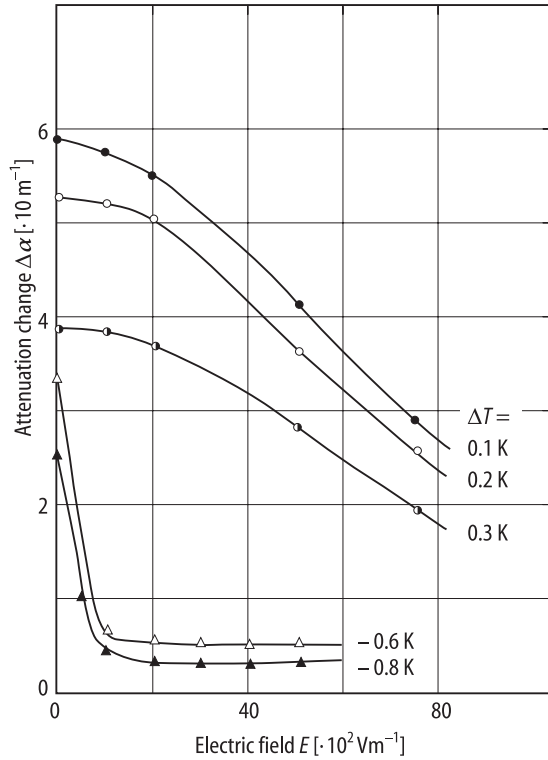


Fig. 33A-3-062. CsH₂PO₄ (CDP). $\Delta\alpha$ vs. E [93Ani]. Parameter: $\Delta T = T - \Theta_f$. $\Delta\alpha = \alpha(T, E) - \alpha(T', E)$ ($T' \gg \Theta_f$), where α is attenuation coefficient of longitudinal elastic wave propagating along b axis. $f = 10$ MHz.

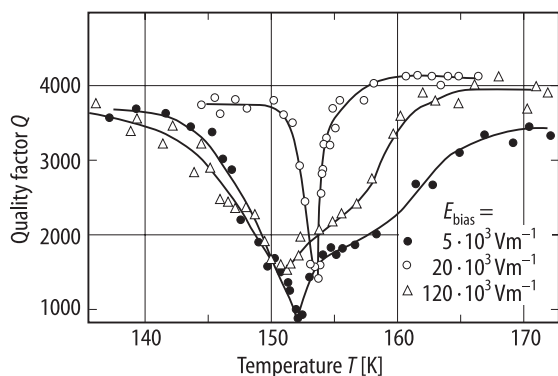


Fig. 33A-3-063. CsH_2PO_4 (CDP). Q vs. T [88Sor]. Parameter: E_{bias} . Q : mechanical quality factor. Open circle: $E_{\text{bias}} = 5 \cdot 10^3 \text{ V m}^{-1}$; full circle: $20 \cdot 10^3 \text{ V m}^{-1}$; open triangle: $120 \cdot 10^3 \text{ V m}^{-1}$. $E_{\text{bias}} \parallel [010]$. $f = 200 \text{ kHz}$.

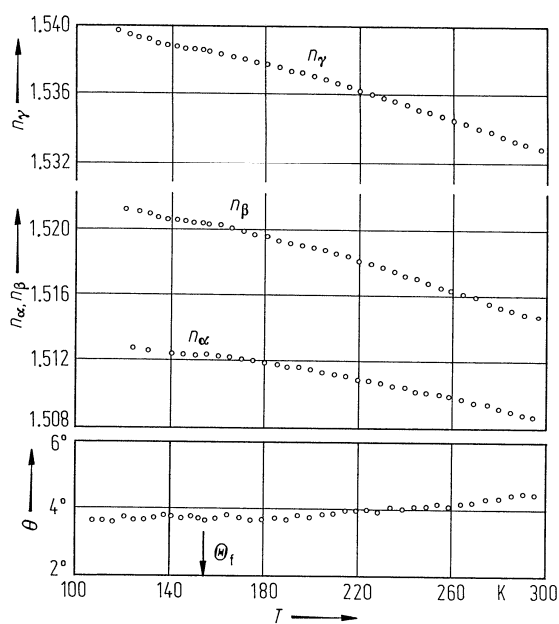


Fig. 33A-3-064. CsH_2PO_4 (CDP). $n_\alpha, n_\beta, n_\gamma, \theta$ vs. T [84Ush]. $\lambda = 589 \text{ nm}$. $n_\alpha, n_\beta, n_\gamma$: principal values of the optical indicatrix. θ : rotation angle of the optical indicatrix. n_α is the value parallel to the b axis.

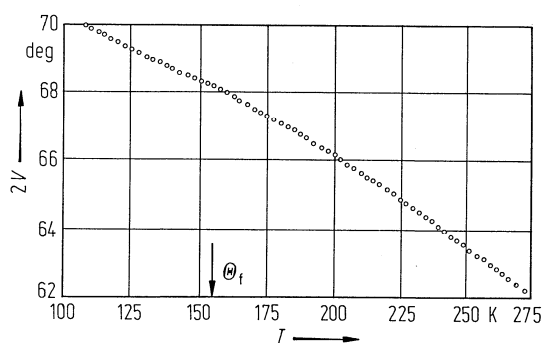


Fig. 33A-3-065. CsH_2PO_4 (CDP). $2V$ vs. T [84Ush]. $2V$: optical axial angle. $\lambda = 589 \text{ nm}$.

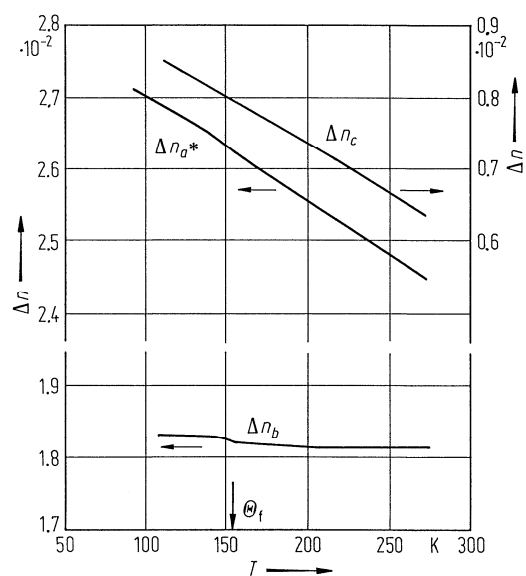


Fig. 33A-3-066. CsH_2PO_4 (CDP). Δn vs. T [84Ush]. $\lambda = 589$ nm. Δn_a , Δn_b and Δn_c are values obtained for light propagating along the $a^* \parallel b \times c$, b , c axes, respectively.

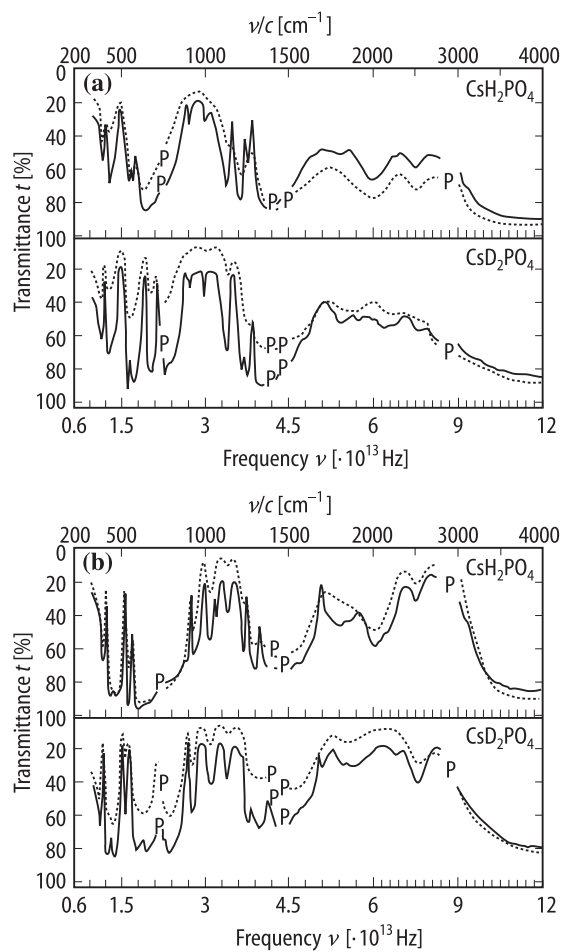


Fig. 33A-3-067. CsH_2PO_4 (CDP), CsD_2PO_4 (DCDP). t vs. ν [87Vid]. Parameter: T . t : transmittance of polarized infrared radiation measured in (100) face. (a) $E \parallel b$, (b) $E \perp b$. Solid line: $T = 20$ K, dashed line: $T = 300$ K. P: paraffin wax absorption region.

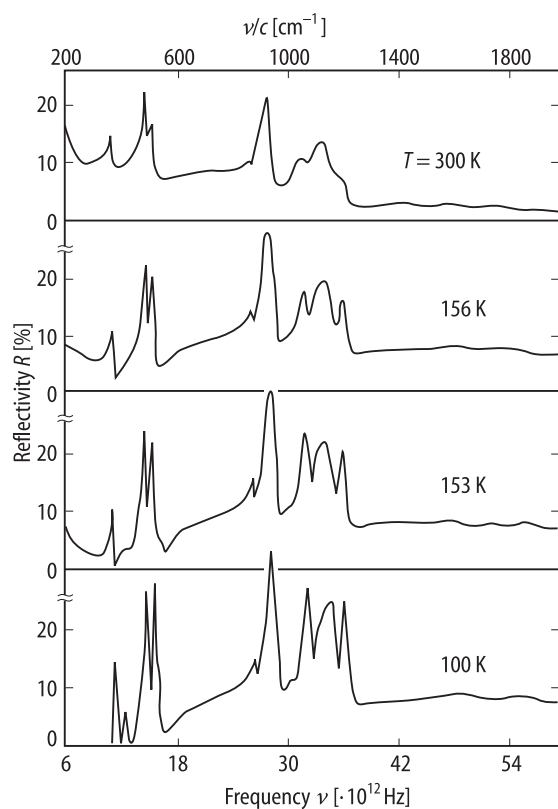


Fig. 33A-3-068. CsH_2PO_4 (CDP). R vs. ν [90Kwu]. Parameter: T . R : reflectivity. $E \parallel b$.

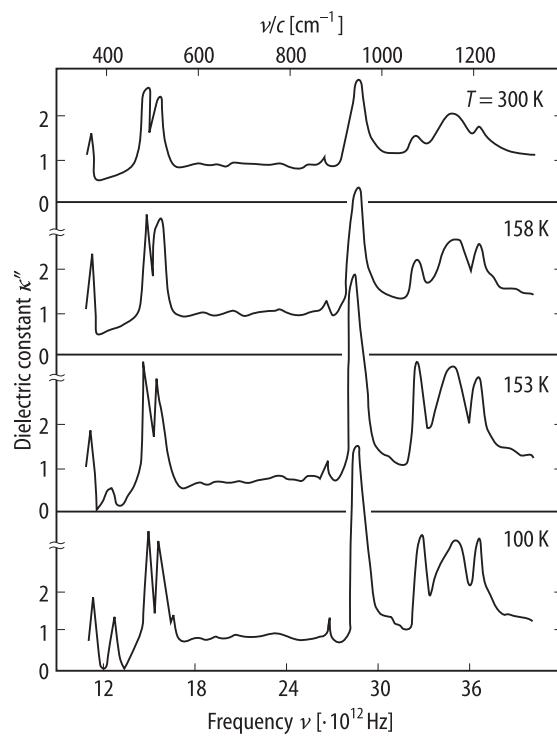


Fig. 33A-3-069. CsH_2PO_4 (CDP). κ'' vs. ν [90Kwu]. Parameter: T . $E \perp b$.

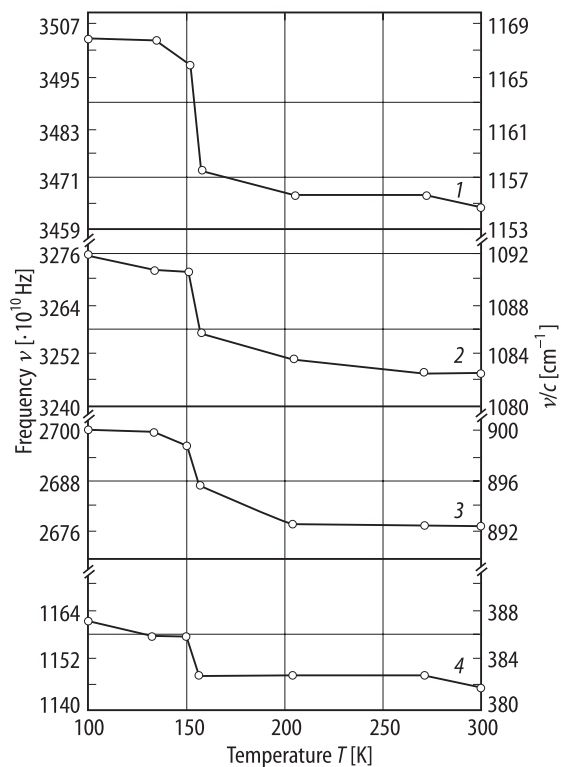


Fig. 33A-3-070. CsH_2PO_4 (CDP). ν vs. T [90Kwu]. ν : frequency of internal mode of PO_4 . 1–3: P–O stretching modes; 4: O–P–O bending mode.

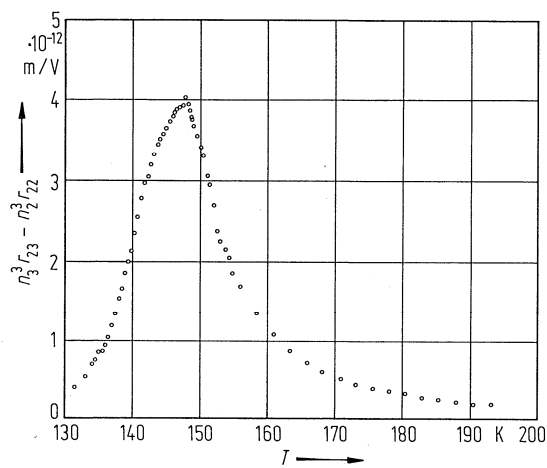


Fig. 33A-3-071. CsH_2PO_4 (CDP). $n_3^3 r_{23} - n_2^3 r_{22}$ vs. T [80Cop]. $E_{\text{bias}} = 1.8 \cdot 10^5 \text{ V m}^{-1}$.

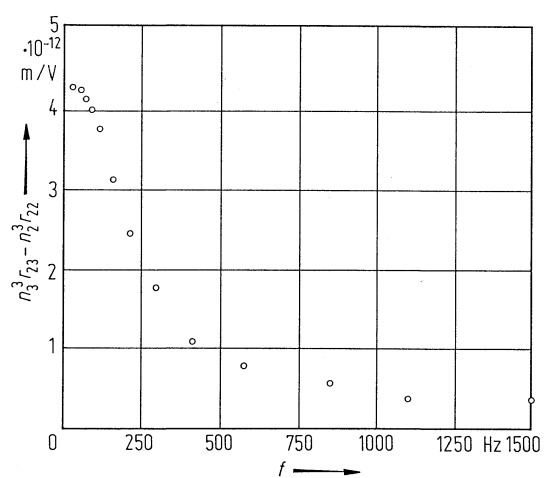


Fig. 33A-3-072. CsH₂PO₄ (CDP). $n_3^3 r_{23} - n_2^3 r_{22}$ vs. f [80Cop]. $T = 147.5 \text{ K}$. f : frequency of applied electric field.

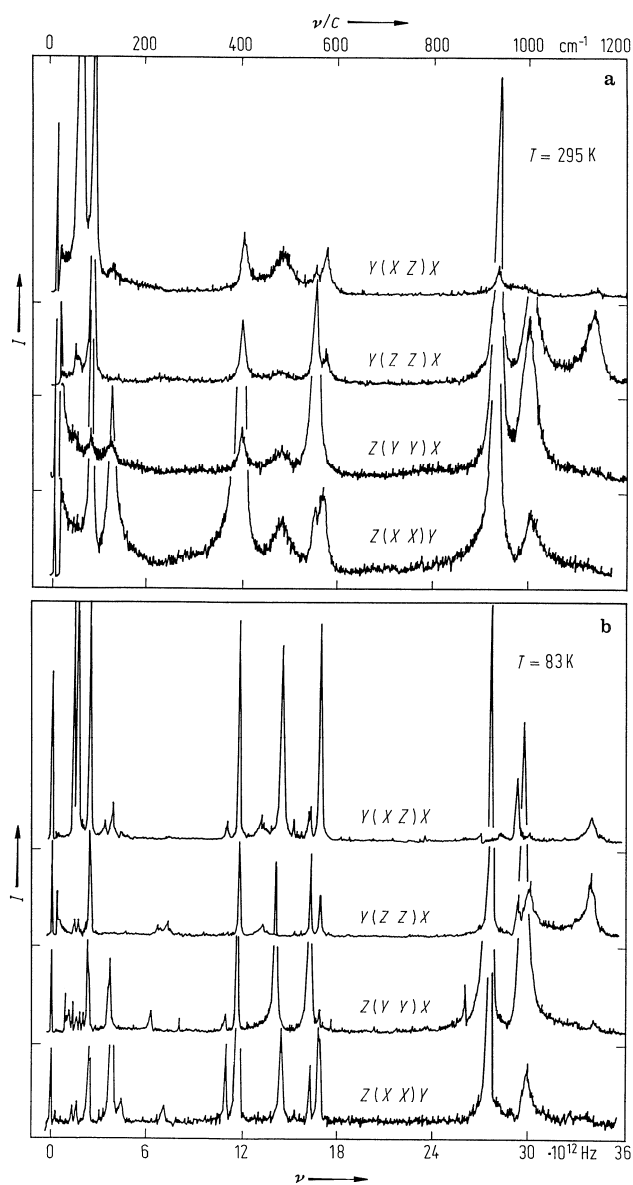


Fig. 33A-3-073. CsH_2PO_4 (CDP). I vs. ν at (a) 295 K and (b) 83 K for A_g and A symmetry modes [84Aok]. I : Raman scattering intensity. $X \parallel a^*$.

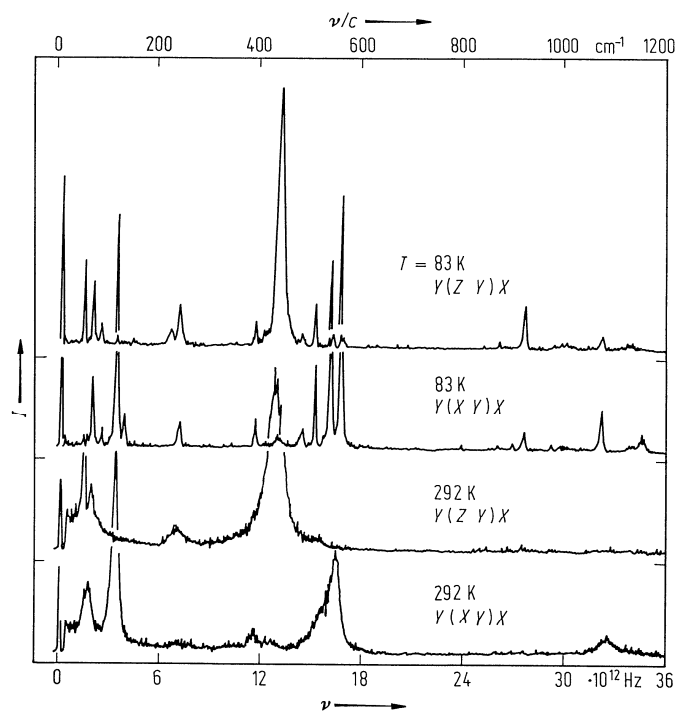


Fig. 33A-3-074. CsH_2PO_4 (CDP). I vs. ν at 292 K and 83 K for B_g and B symmetry modes [84Aok]. I : Raman scattering intensity. $X \parallel a^*$.

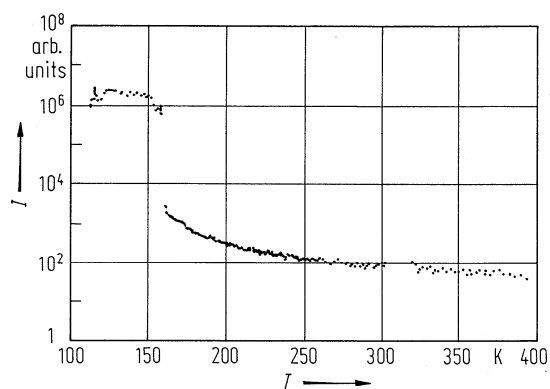


Fig. 33A-3-075. CsH_2PO_4 (CDP). I vs. T [87Shi]. I : intensity of a central mode measured by hyper-Raman scattering in $X(ZZ)Y$ scattering geometry.

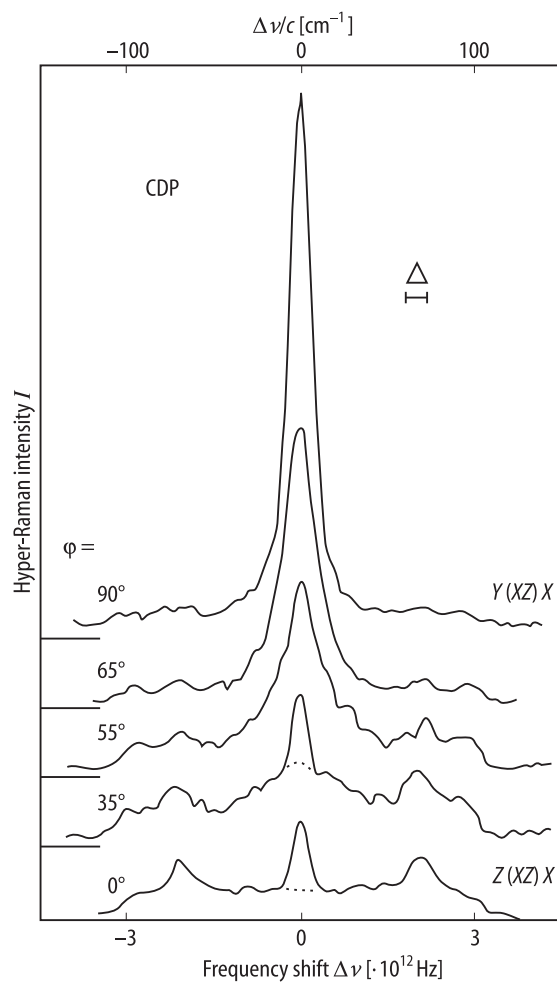


Fig. 33A-3-076. CsH_2PO_4 (CDP). I vs. $\Delta\nu$ [88Shi]. I : hyper-Raman scattering intensity. Parameter: ϕ : ϕ : angle from the b axis. $T = \text{RT}$.

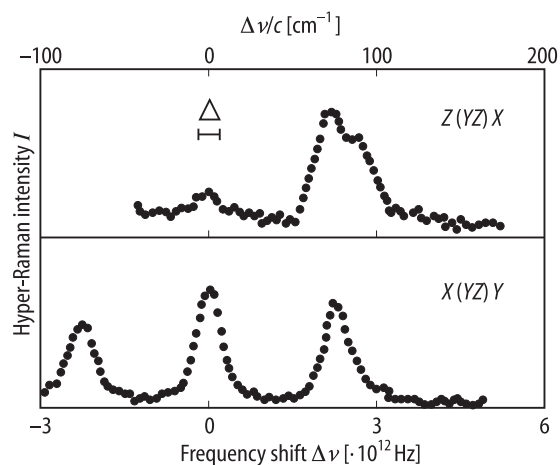


Fig. 33A-3-077. CsH_2PO_4 (CDP). I vs. $\Delta\nu$ [88Shi]. I : hyper-Raman scattering intensity. $T = \text{RT}$.

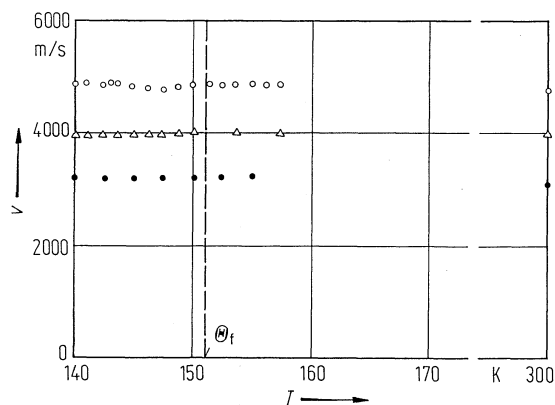


Fig. 33A-3-078. CsH₂PO₄ (CDP). v vs. T [81Mar]. Parameter: q : q : phonon wave vector. v : velocity of longitudinal acoustic phonons measured by Brillouin scattering. Open circle: $q \parallel [1, 0, 0]$; full circle: $q \parallel [0, 1, 0]$; open triangle: quasi-longitudinal wave, $q \parallel [-1/2, -1/2, -1/\sqrt{2}]$.

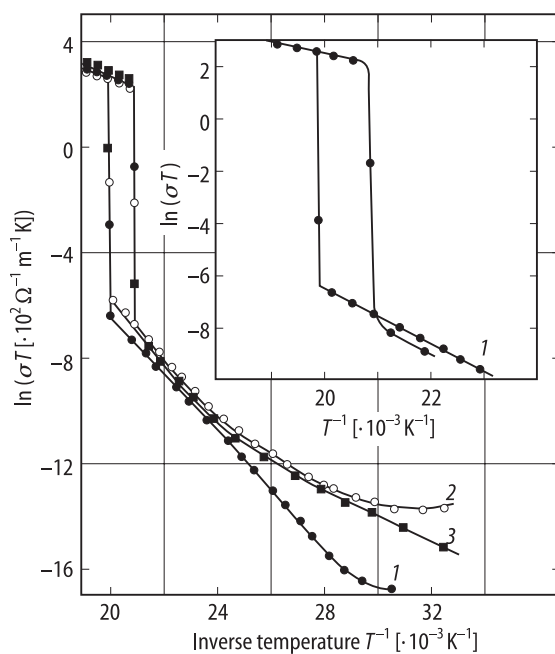


Fig. 33A-3-079. CsH₂PO₄ (CDP). $\ln(\sigma T)$ vs. T^{-1} [88Bar]. σ : electrical conductivity in units of $10^2 \Omega^{-1} \text{m}^{-1}$. T : temperature in units of K. 1: a direction, 2: b direction, 3: c direction.

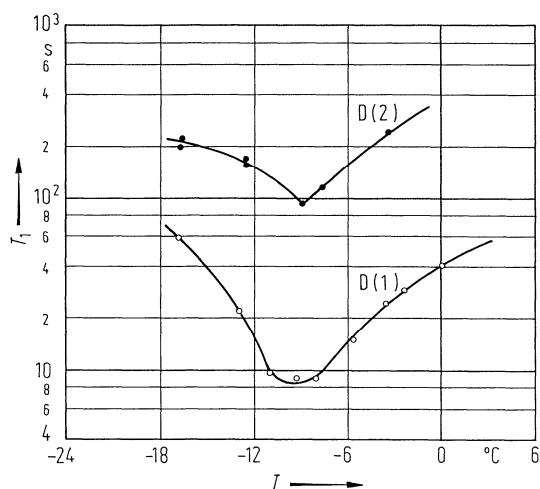


Fig. 33A-3-080. CsD_2PO_4 (DCDP). T_1 vs. T [80Top]. T_1 : deuteron spin-lattice relaxation time. $\nu_L = 41.45$ MHz, $H \parallel c$.

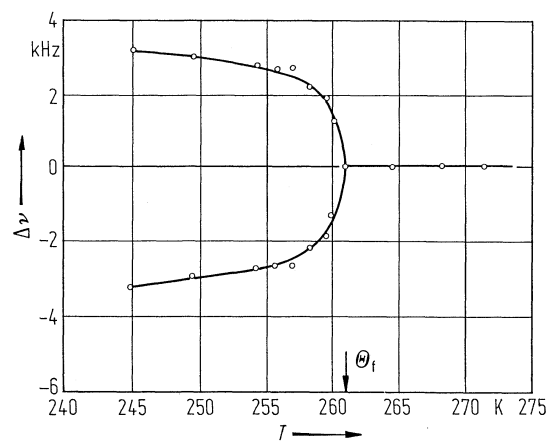


Fig. 33A-3-081. CsD_2PO_4 (DCDP). $\Delta\nu$ vs. T [80Top]. $\Delta\nu$: quadrupole splitting of O-D(1)...O deuteron NMR line. $\nu_L = 13.8$ MHz.

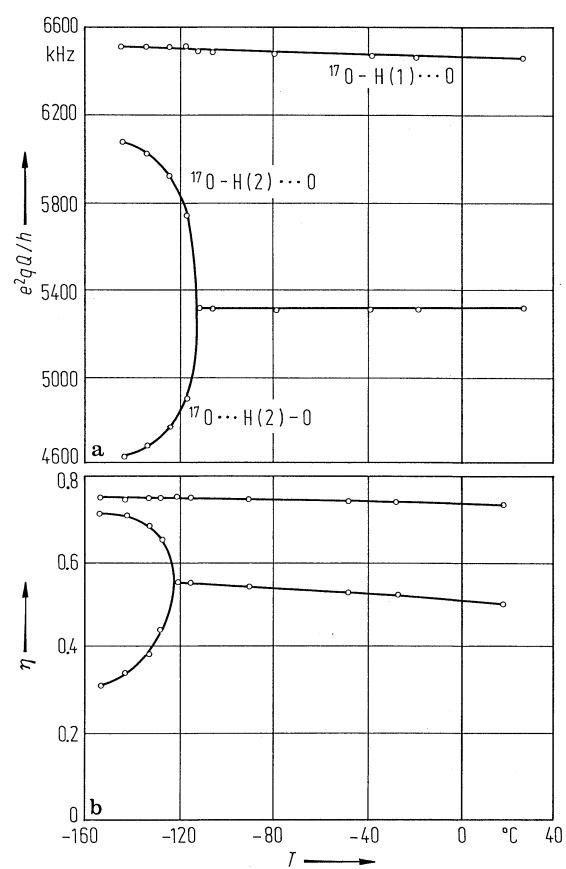


Fig. 33A-3-082. CsH_2PO_4 (CDP). ^{17}O NQR [84Sel]. (a) e^2qQ/h vs. T . (b) η vs. T . η : asymmetry parameter.

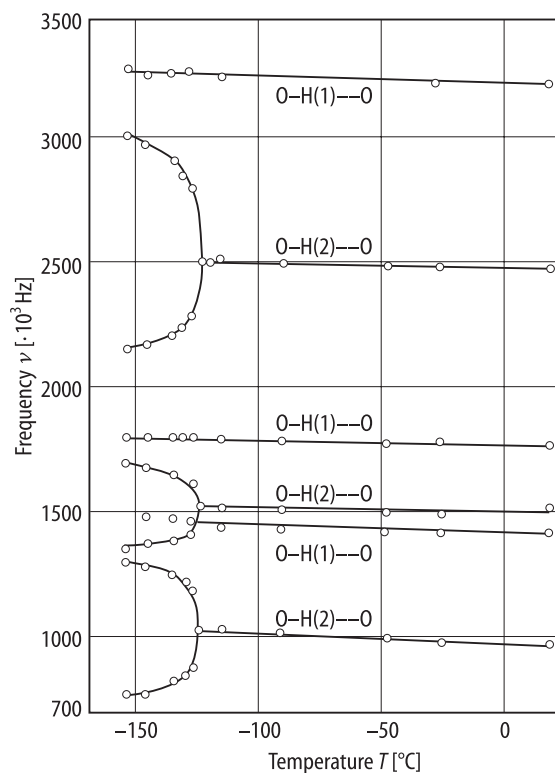


Fig. 33A-3-083. CsH_2PO_4 (CDP). ν vs. T [86Bli, 84Sel]. ν : ^{17}O NQR frequency.

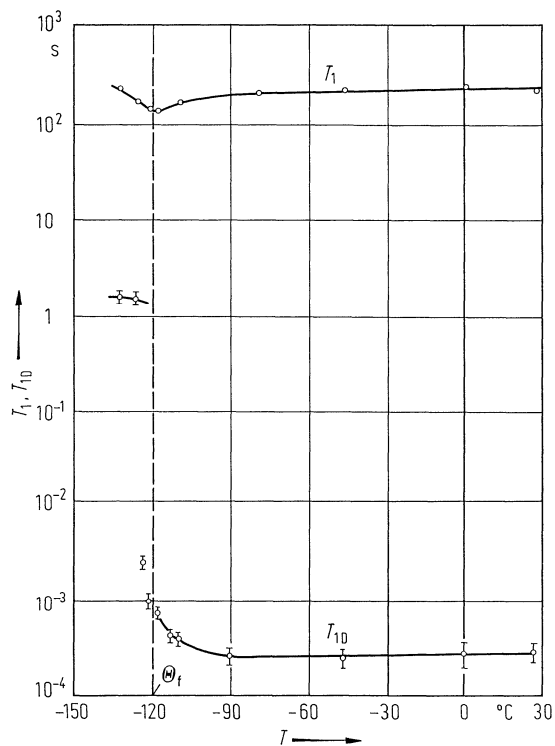


Fig. 33A-3-084. CsH_2PO_4 (CDP). T_1 , T_{1D} vs. T [80Sla]. T_1 : ^{31}P spin-lattice relaxation time. T_{1D} : ^{31}P spin-lattice relaxation time in dipolar field. $H \parallel c$, $\nu_L = 23.8$ MHz.

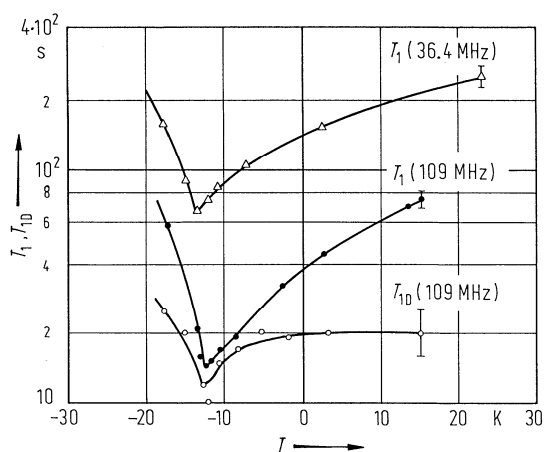


Fig. 33A-3-085. CsD_2PO_4 (DCDP). T_1 , T_{1D} vs. T [80Bli]. T_1 : ^{31}P spin-lattice relaxation time. T_{1D} : ^{31}P spin-lattice relaxation time in dipolar field. $\mathbf{H} \parallel \mathbf{c}$.

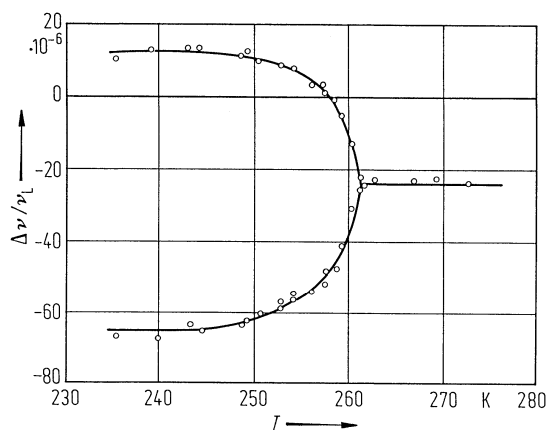


Fig. 33A-3-086. CsD_2PO_4 (DCDP). $\Delta\nu/\nu_L$ vs. T [80Bli]. $\Delta\nu$: ^{31}P chemical shift splitting. $\nu_L = 109.3$ MHz.

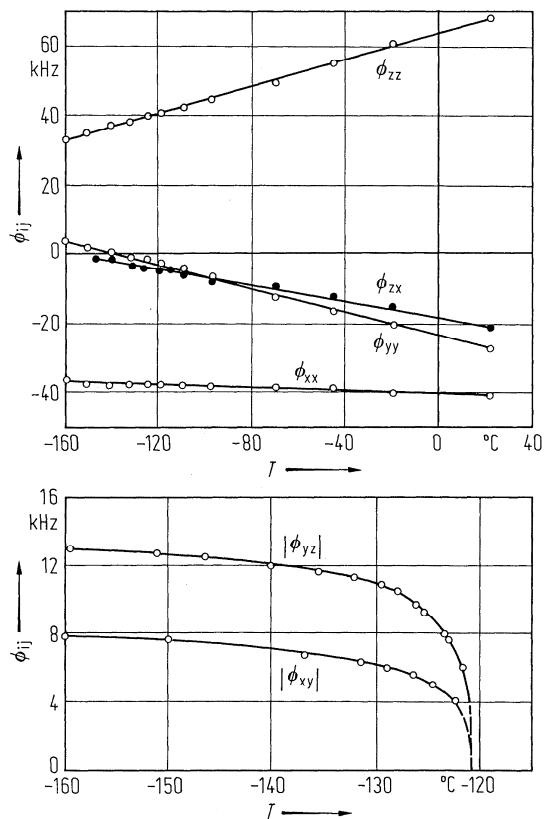


Fig. 33A-3-087. CsH_2PO_4 (CDP). ϕ_{ij} vs. T [77Kan]. ϕ_{ij} : electric field gradient tensor components of ^{133}Cs . $x \perp b$, $z \parallel c$.

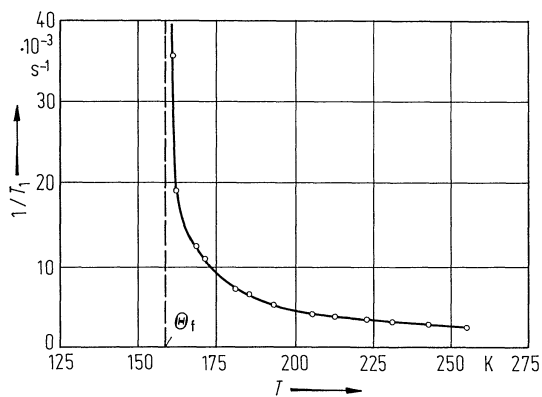


Fig. 33A-3-088. CsH_2PO_4 (CDP). T_1^{-1} vs. T [83Bli]. T_1 : ^{133}Cs spin-lattice relaxation time. $\nu_L = 8.8 \text{ MHz}$. $H \perp c$. $\angle(H, a) = 90^{\circ}$.

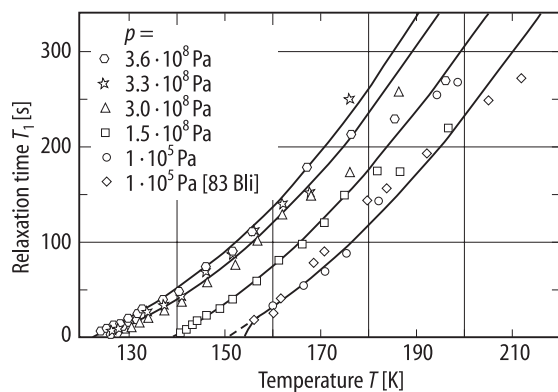


Fig. 33A-3-089. CsH_2PO_4 (CDP). T_1 vs. T [89Sch]. Parameter: p . T_1 : ^{133}Cs spin-lattice relaxation time.

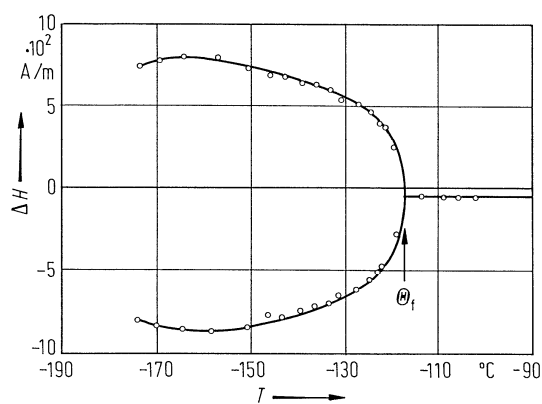


Fig. 33A-3-090. CsH_2PO_4 (CDP). ΔH vs. T [85Bli]. ΔH : splitting of Ti^{2+} doublet. $\mathbf{H} \perp \mathbf{b}$; $\angle(\mathbf{H}, \mathbf{c}) = 25^\circ$.

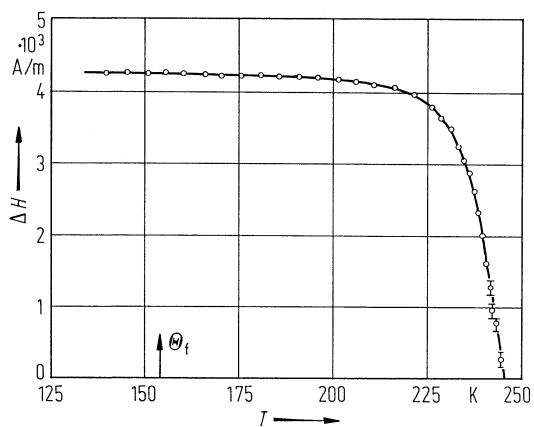


Fig. 33A-3-091. CsH_2PO_4 (CDP). ΔH vs. T [84Wap]. ΔH : $(\text{CrO}_4)^{3-}$ ESR line splitting. $\mathbf{H} \parallel [110]$.

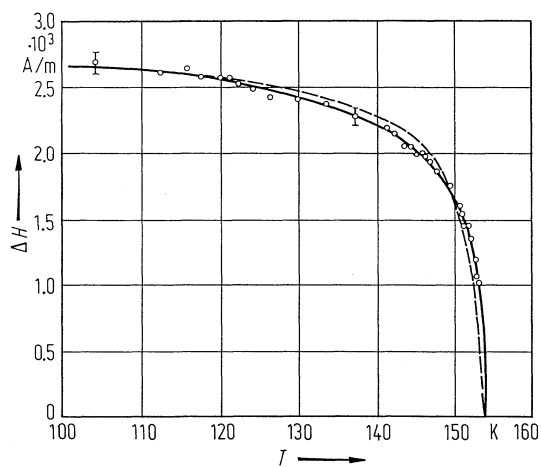


Fig. 33A-3-092. CsH_2PO_4 (CDP). ΔH vs. T [80Tak]. ΔH : line splitting for $(\text{AsO}_3)^{2-}$ radical. $\nu_L = 9 \cdot 10^{10}$ Hz. Dashed line: spontaneous polarization obtained from D - E hysteresis loop.

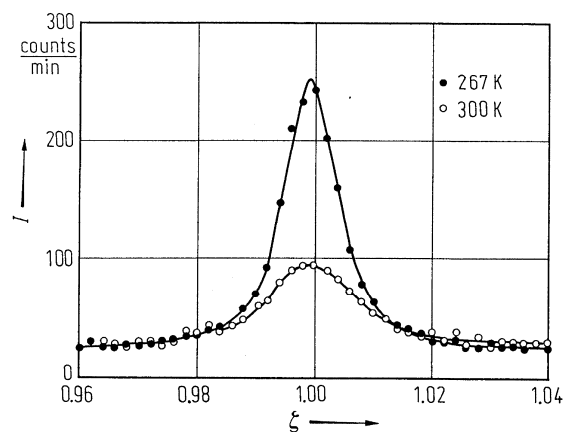


Fig. 33A-3-093. CsD_2PO_4 (DCDP). I vs. ζ [77Sem]. I : neutron scattering intensity at $(2.15, \zeta, 0)$.

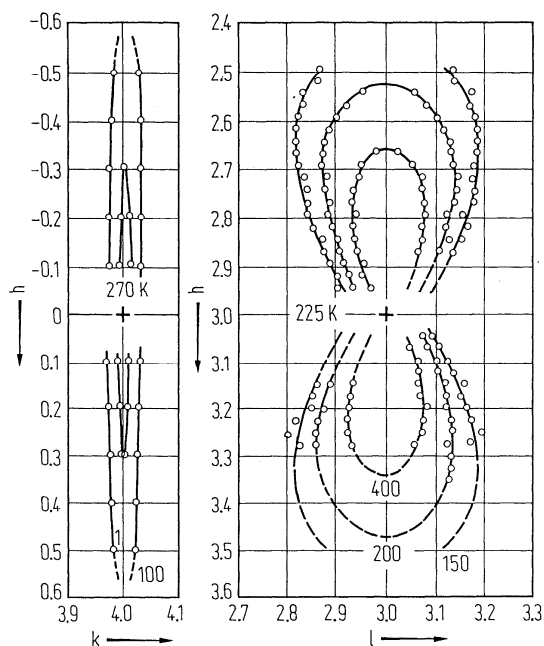


Fig. 33A-3-094. CsD_2PO_4 (DCDP), KD_2PO_4 (DKDP). Neutron scattering intensity contours [77Sem]. (a) Contours in the $(h k 0)$ zone near $(0 4 0)$ for CsD_2PO_4 at $T = 270$ K. (b) Contours in the $(h 0 l)$ zone near $(3 0 3)$ for KD_2PO_4 at $T = 225$ K. The figures are drawn to the same scale in inverse. The intensity units are arbitrary. See also [70Ska].

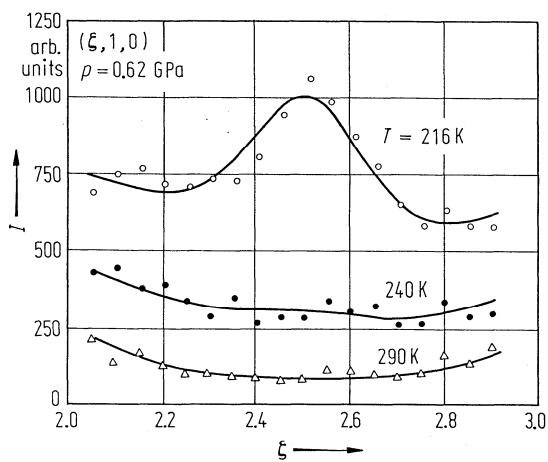


Fig. 33A-3-095. CsD_2PO_4 (DCDP). I vs. ζ at $p = 0.62$ GPa [80You]. I : neutron diffuse scattering intensity at $(\zeta, 1, 0)$. Parameter: T .

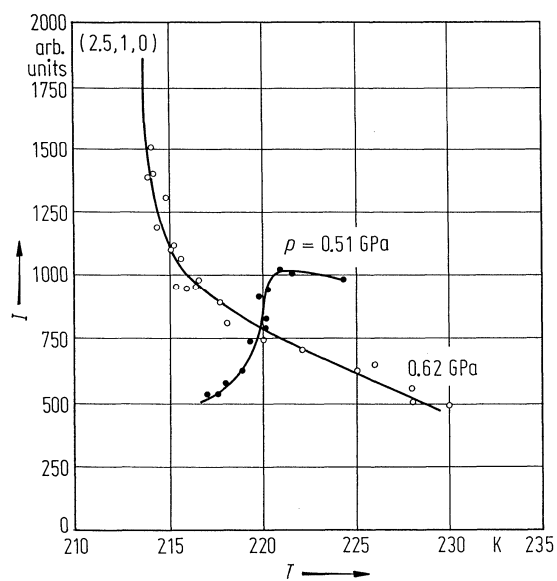


Fig. 33A-3-096. CsD_2PO_4 (DCDP). I vs. T [80You]. I : neutron diffuse scattering intensity at $(2.5, 1, 0)$. Parameter: p .

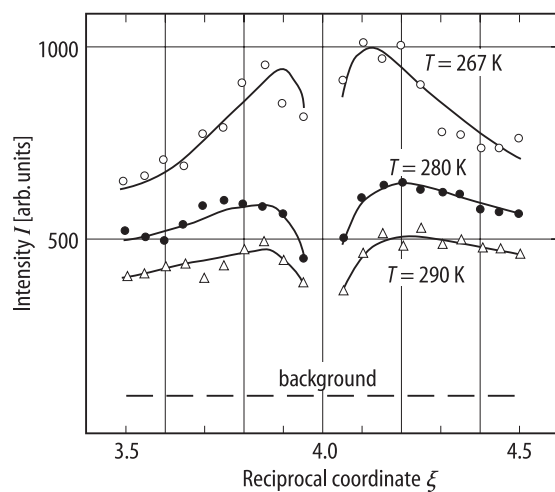


Fig. 33A-3-097. CsD_2PO_4 (DCDP). I vs. ξ [80You]. Parameter: T . I : neutron diffuse scattering intensity parallel to a^* in the reciprocal space around $(4, 3, 0)$.

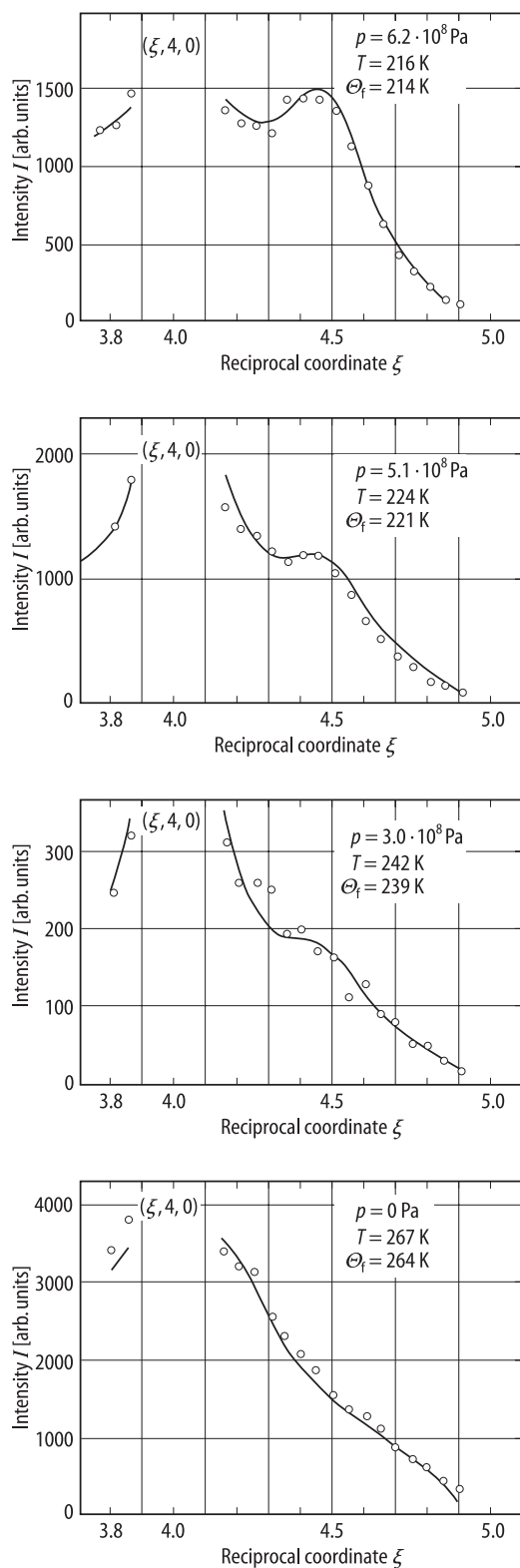


Fig. 33A-3-098. CsD_2PO_4 (DCDP). I vs. ξ [80You]. Parameters: T , p . I : neutron diffuse scattering intensity at $(\xi, 4, 0)$ in the reciprocal space around $(0, 4, 0)$. $T - \Theta_f$ are held approximately constant. Data for $p = 0$ are from [79Fra].

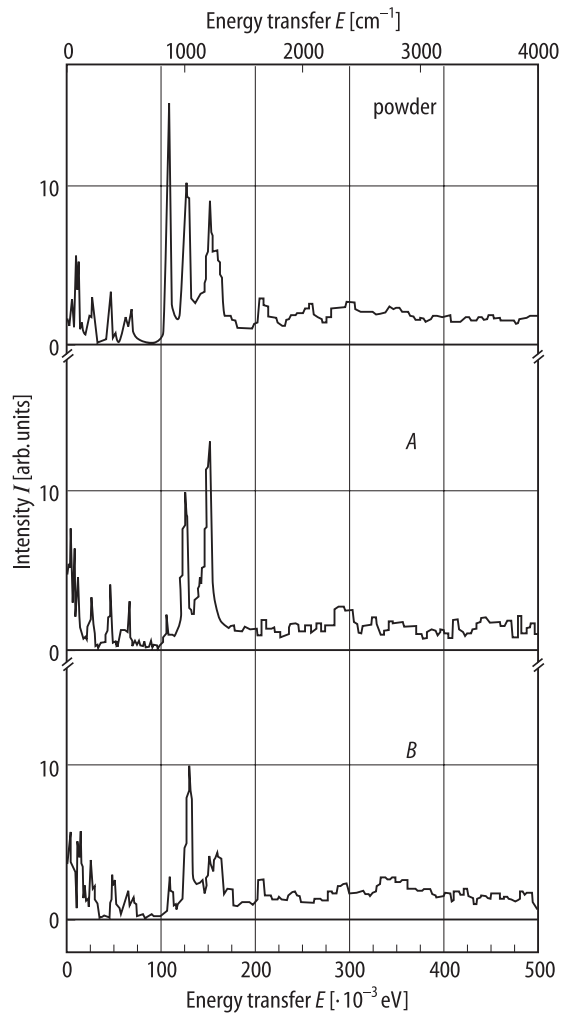


Fig. 33A-3-099. CsH_2PO_4 (CDP). I vs. E [89Fil]. I : inelastic neutron scattering intensity. E : energy transfer. $T = 20$ K. A : single crystals with the incident beam perpendicular to $[001]$; B : single crystal, incident beam perpendicular to $[100]$.

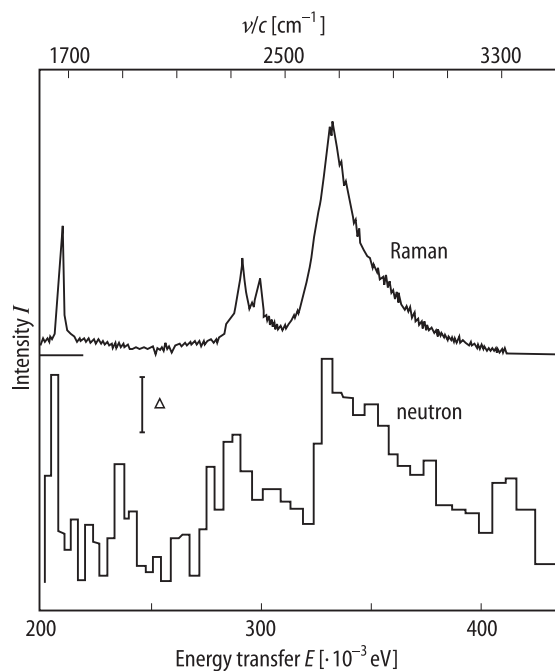


Fig. 33A-3-100. CsH_2PO_4 (CDP). I vs. E [89Fil]. I : inelastic neutron scattering intensity in the OH stretching region of the long hydrogen bond along the c axis. E : energy transfer. $T = 20$ K. Δ : instrumental error for neutron scattering. Raman spectrum is indicated for comparison.

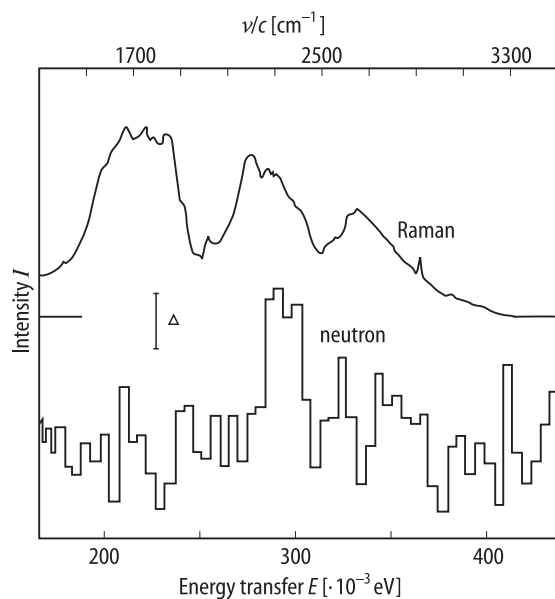


Fig. 33A-3-101. CsH_2PO_4 (CDP). I vs. E [89Fil]. I : inelastic neutron scattering intensity in the OH stretching region of the short hydrogen bond along the a^* axis. E : energy transfer. $T = 20$ K. Δ : instrumental error for neutron scattering. Raman spectrum is indicated for comparison.

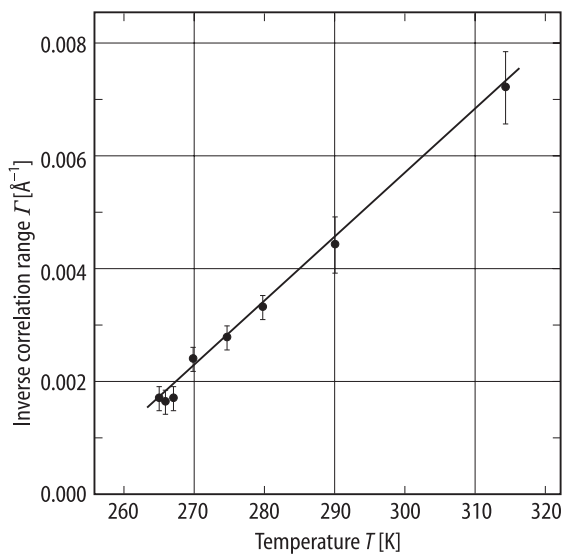


Fig. 33A-3-102. CsH_2PO_4 (CDP). F^{-1} vs. T [79Fra]. F^{-1} : intrachain inverse correlation range determined from neutron scattering in (h k 0) zone.

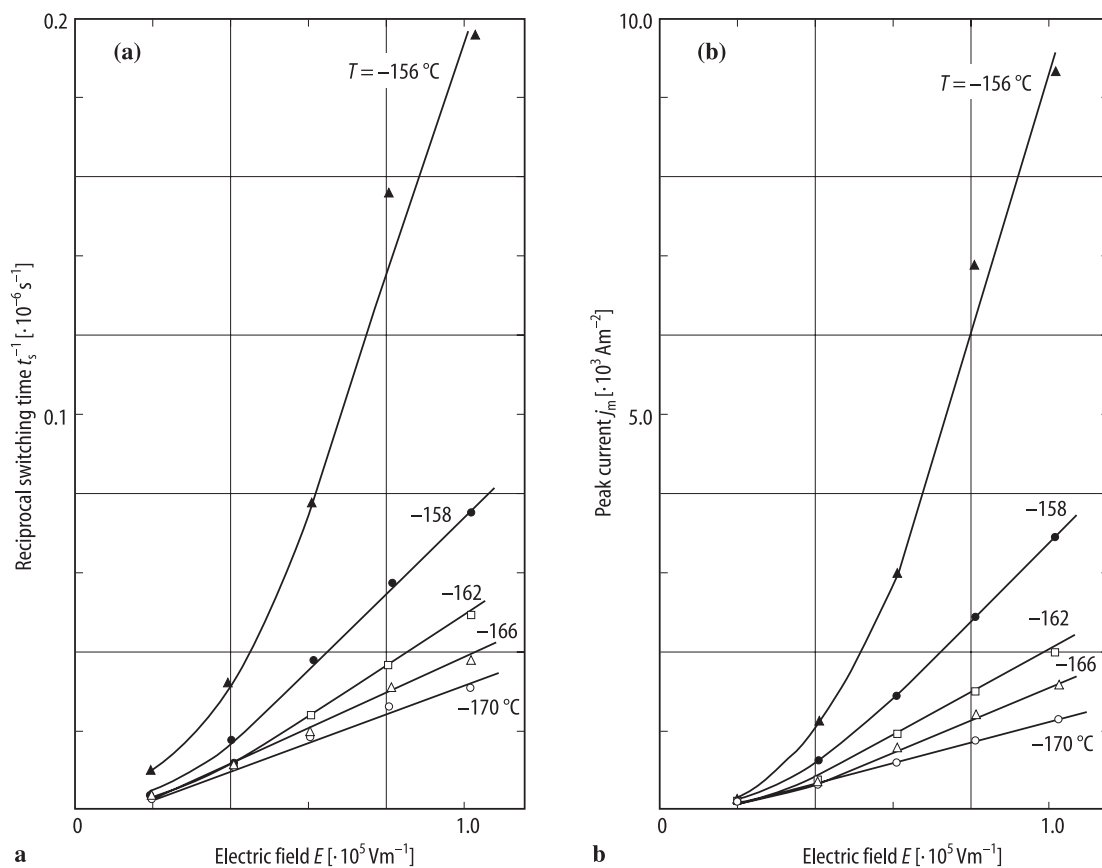


Fig. 33A-3-103. CsH_2PO_4 (CDP). t_s^{-1} , j_m vs. E in the pressure induced antiferroelectric phase [79Yas2]. Parameter: T : t_s : switching time. j_m : maximum switching current density. E : applied electric field. $p = 4 \cdot 10^8$ Pa.

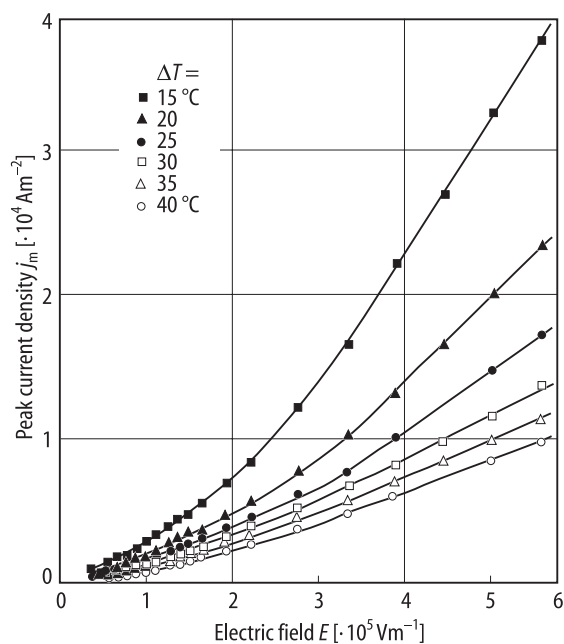


Fig. 33A-3-104. CsH_2PO_4 (CDP). j_m vs. E [83Fuj]. Parameter: $\Delta T = \Theta_t - T$. j_m : maximum switching current density.

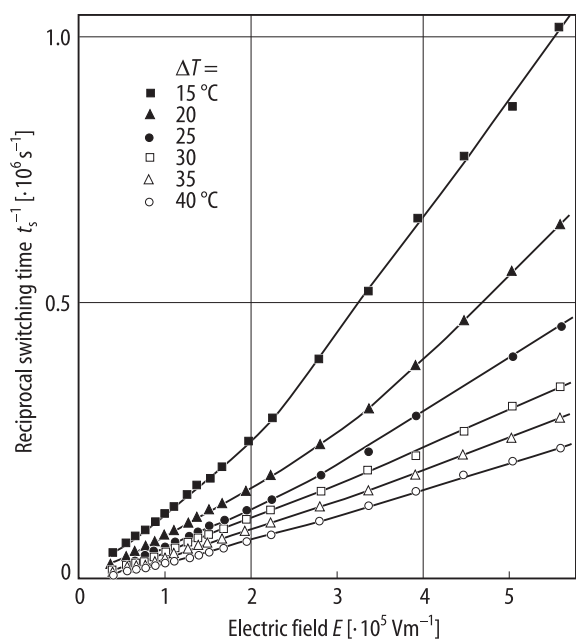


Fig. 33A-3-105. CsH_2PO_4 (CDP). t_s^{-1} vs. E [83Fuj]. Parameter: $\Delta T = \Theta_t - T$. t_s : switching time.