

Fig. 42A-1-001. $[(\text{NH}_4)_3\text{H}]_{1-x}[(\text{ND}_4)_3\text{D}]_x(\text{SO}_4)_2$. Θ vs. x [80Osa]. The dashed line indicates positions of broad maximum in dielectric constant. Open circles: on cooling, full circles: on heating.

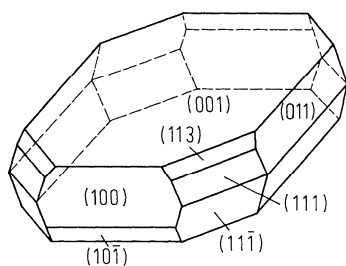


Fig. 42A-1-002. $(\text{NH}_4)_3\text{H}(\text{SO}_4)_2$. Crystal form [04Gos].

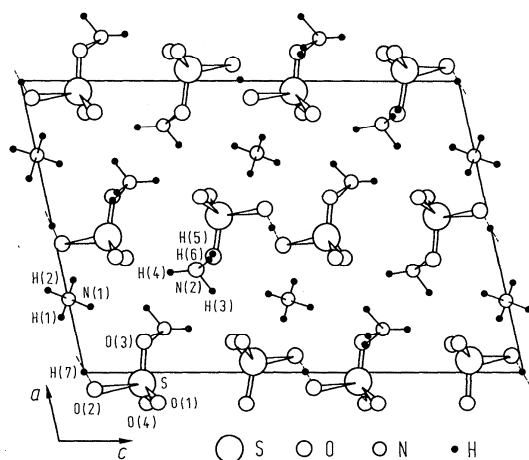


Fig. 42A-1-003. $(\text{NH}_4)_3\text{H}(\text{SO}_4)_2$. Structure of phase II [78Suz]. Projection along b . Dashed lines indicate hydrogen bonds of type O—H...O.

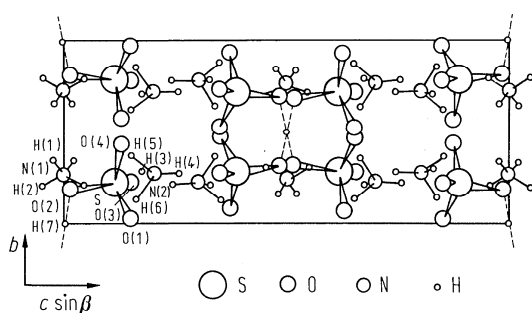


Fig. 42A-1-004. $(\text{NH}_4)_3\text{H}(\text{SO}_4)_2$. Structure of phase II [78Suz]. Projection along a . Dashed lines indicate hydrogen bonds of type O—H...O.

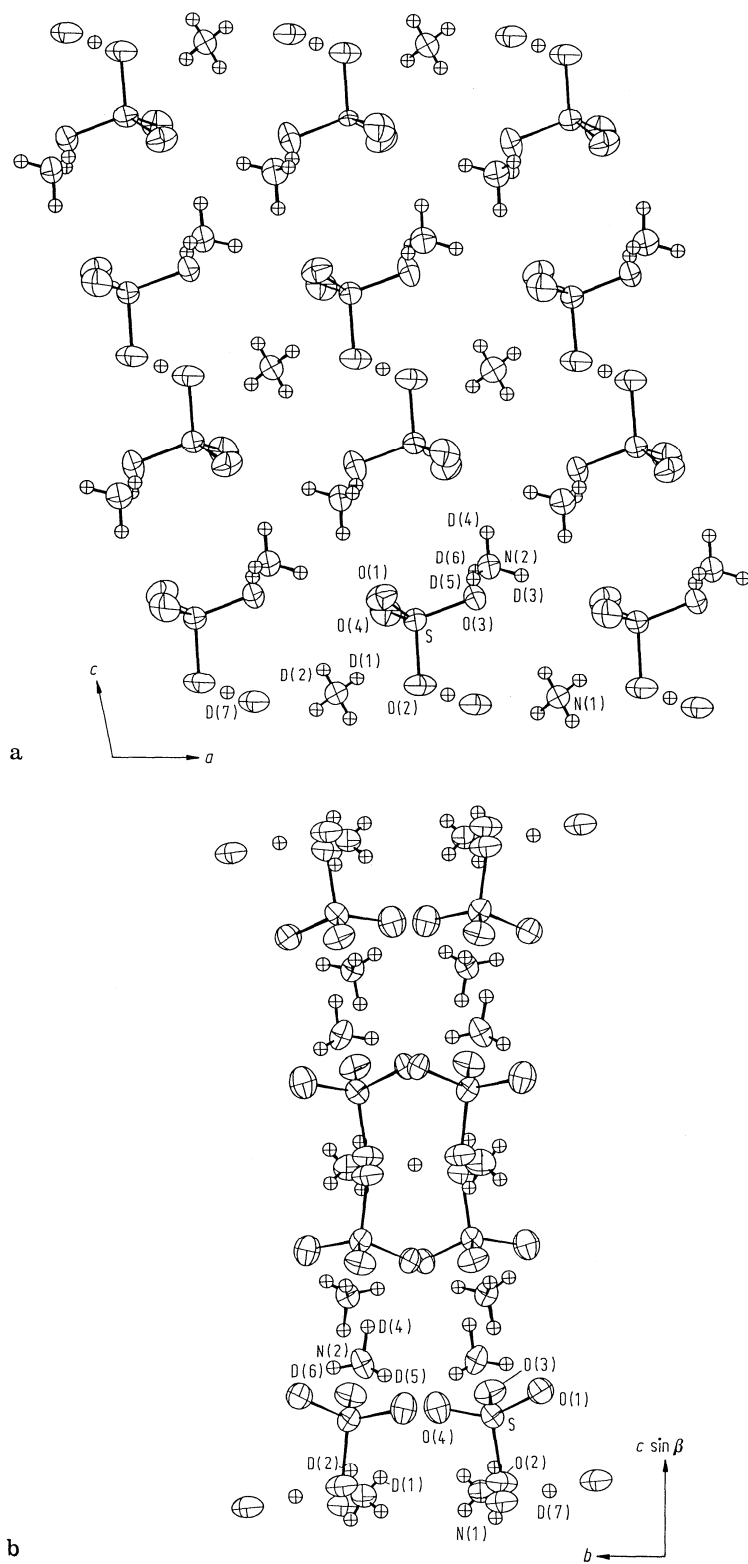


Fig. 42A-1-005. $(\text{ND}_4)_3\text{D}(\text{SO}_4)_2$. Structure of phase II [81Tan]. (a) Projection along b , (b) projection along a .

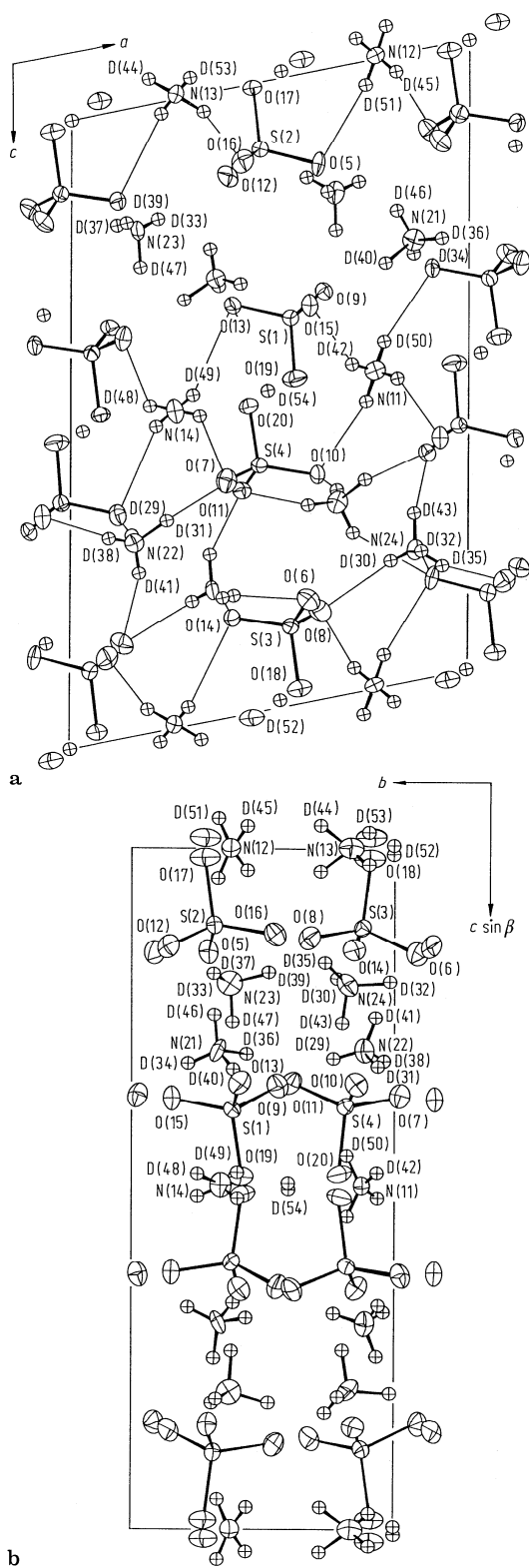


Fig. 42A-1-006. $(\text{ND}_4)_3\text{D}(\text{SO}_4)_2$. Structure of phase III' [86Tan]. (a) Projection along b , (b) projection along a .

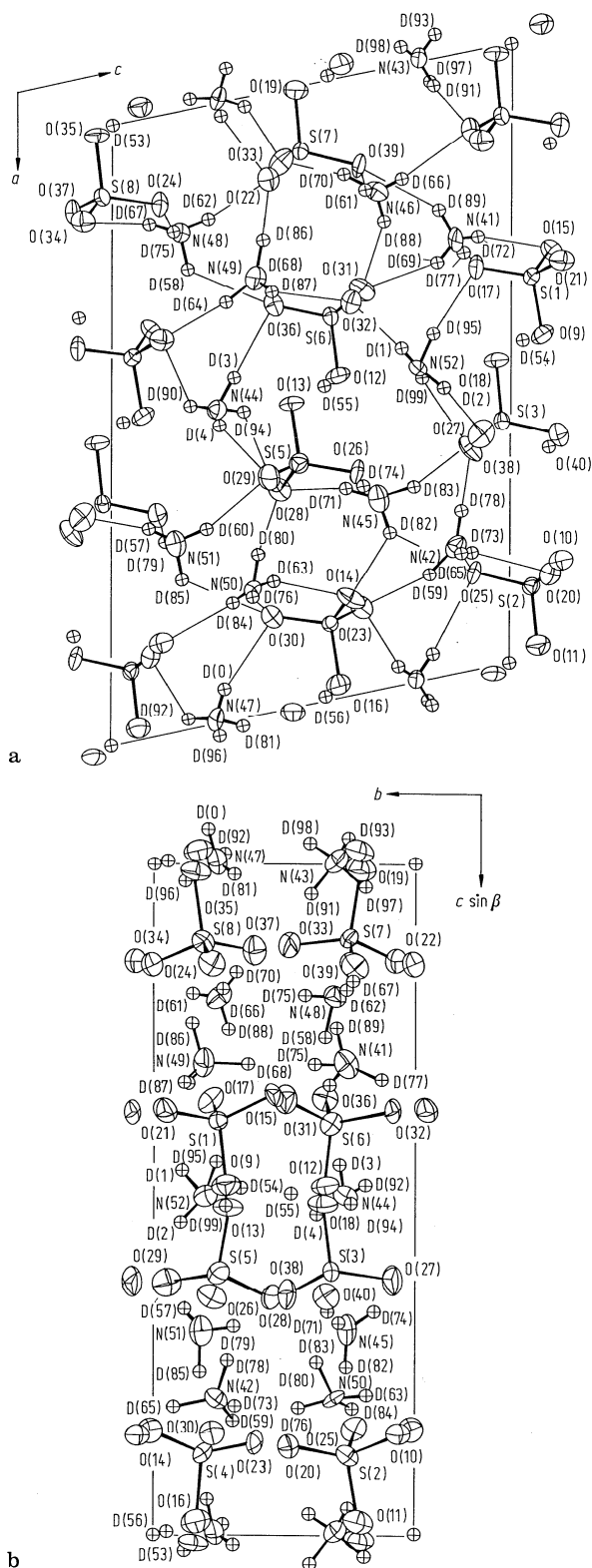


Fig. 42A-1-007. $(\text{ND}_4)_3\text{D}(\text{SO}_4)_2$. Structure of phase VI [86Tan]. **(a)** Projection along b , **(b)** projection along a .

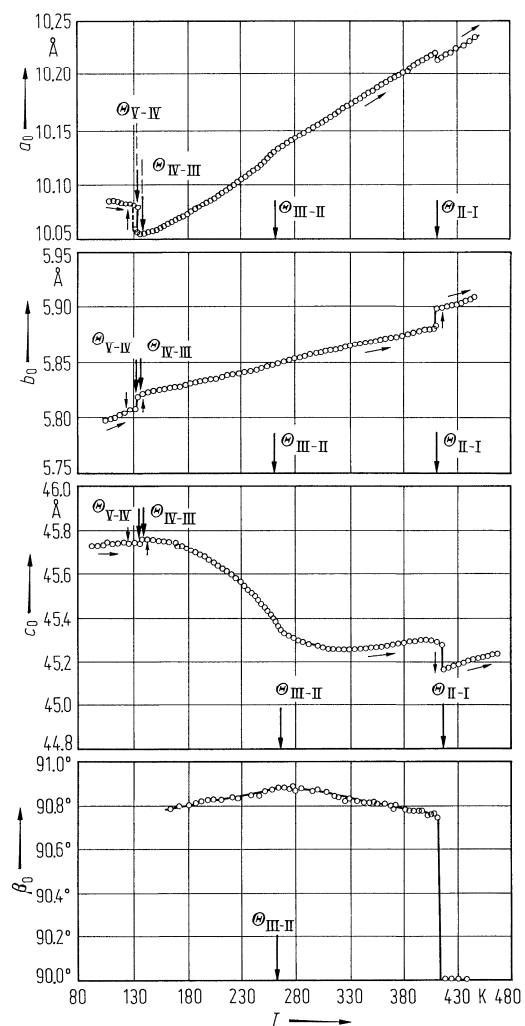


Fig. 42A-1-008. $(\text{NH}_4)_3\text{H}(\text{SO}_4)_2$. a_0 , b_0 , c_0 , β_0 vs. T [79Suz2]. a_0 , b_0 , c_0 , β_0 : lattice parameters of pseudoorthorhombic cell. Relation between unit cell vectors a_0 , b_0 , c_0 and monoclinic unit cell vectors a , b , c : $a_0 = -a$, $b_0 = -b$, $c_0 = a + 3c$.

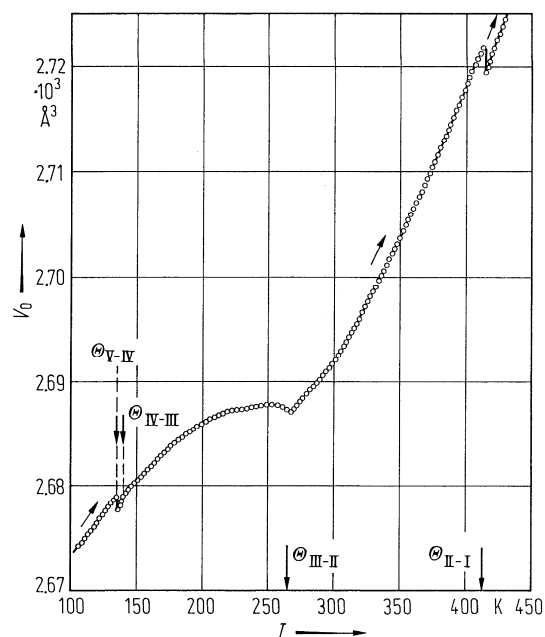


Fig. 42A-1-009. $(\text{NH}_4)_3\text{H}(\text{SO}_4)_2$. V_0 vs. T [79Suz2]. V_0 : volume of pseudoorthorhombic unit cell.

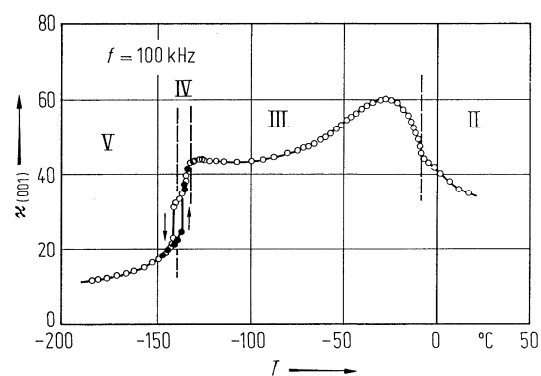


Fig. 42A-1-010. $(\text{NH}_4)_3\text{H}(\text{SO}_4)_2$. $\kappa_{(001)}$ vs. T [76Ges1]. $\kappa_{(001)}$: dielectric constant of (001) plate specimen.

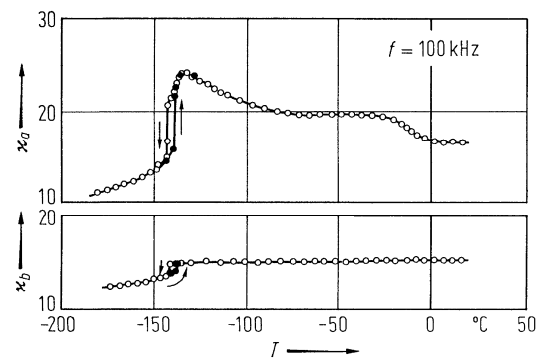


Fig. 42A-1-011. $(\text{NH}_4)_3\text{H}(\text{SO}_4)_2$. κ_a , κ_b vs. T [76Ges1].

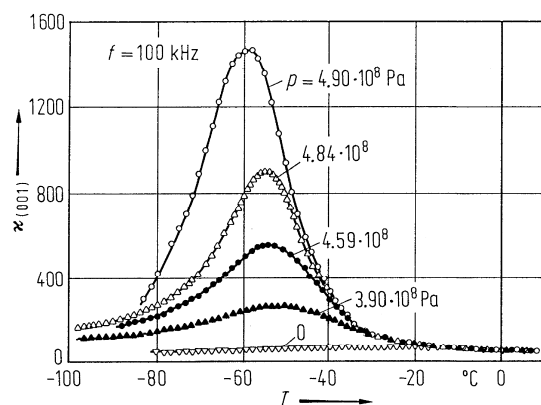


Fig. 42A-1-012. $(\text{NH}_4)_3\text{H}(\text{SO}_4)_2$. $\kappa_{(001)}$ vs. T [77Ges2]. Parameter: p . $\kappa_{(001)}$: dielectric constant of (001) plate specimen.

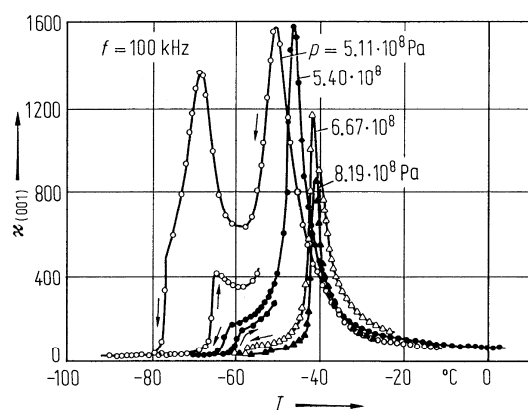


Fig. 42A-1-013. $(\text{NH}_4)_3\text{H}(\text{SO}_4)_2$. $\kappa_{(001)}$ vs. T [77Ges2]. Parameter: p . $\kappa_{(001)}$: dielectric constant of (001) plate specimen.

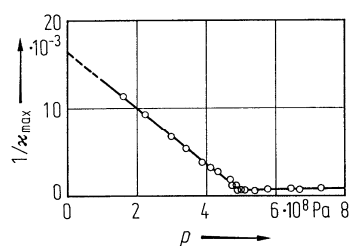


Fig. 42A-1-014. $(\text{NH}_4)_3\text{H}(\text{SO}_4)_2$. $1/\kappa_{\max}$ vs. p [77Ges2]. κ_{\max} : maximum value of $\kappa_{(001)}$ at $f = 100$ kHz. $\kappa_{(001)}$: dielectric constant of (001) plate specimen.

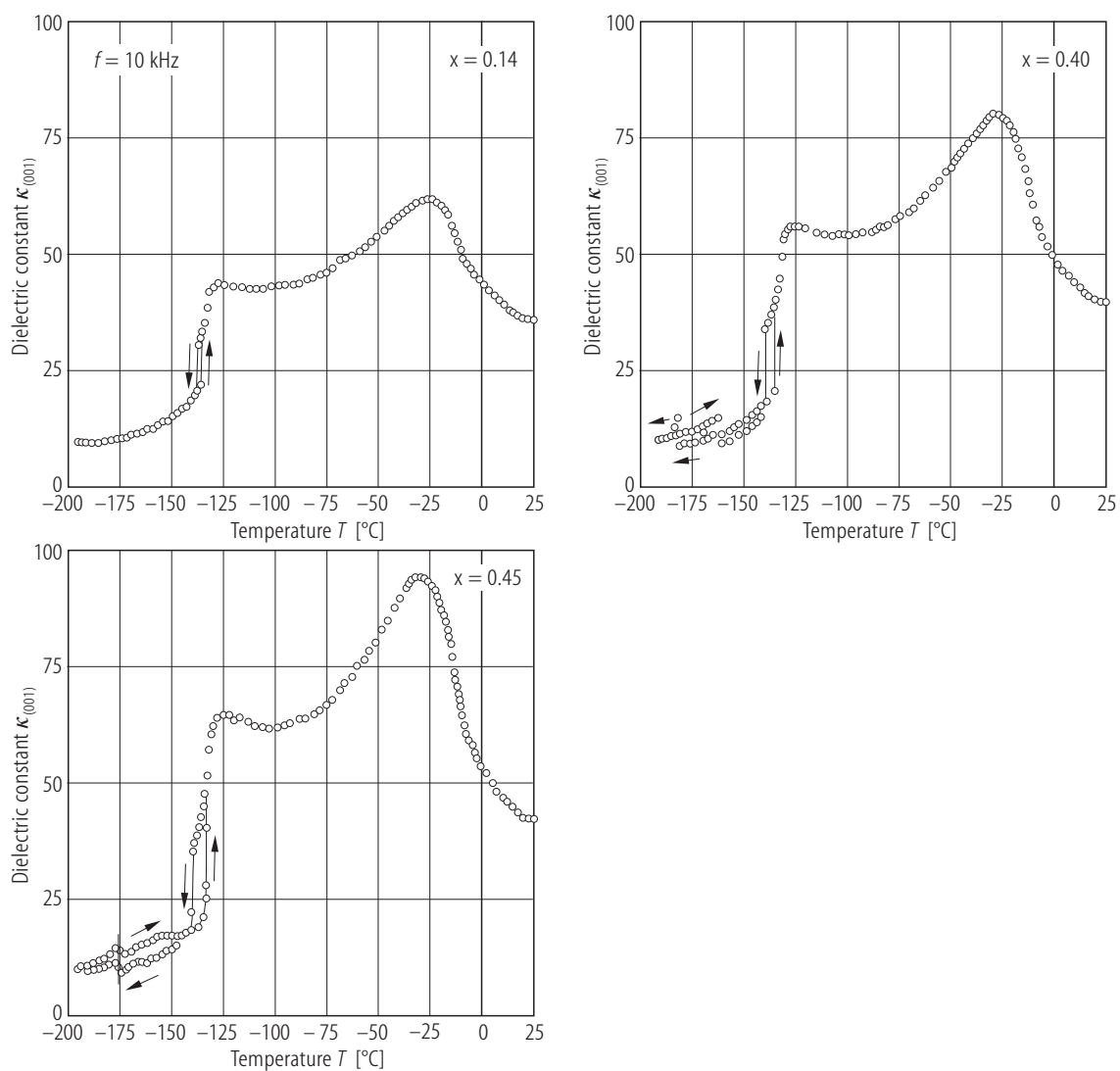


Fig. 42A-1-015. $[(\text{NH}_4)_3\text{H}]_{1-x}[(\text{ND}_4)_3\text{D}]_x(\text{SO}_4)_2$. $\kappa_{(001)}$ vs. T [800sa]. Parameter: x . $\kappa_{(001)}$: dielectric constant of (001) plate specimen.

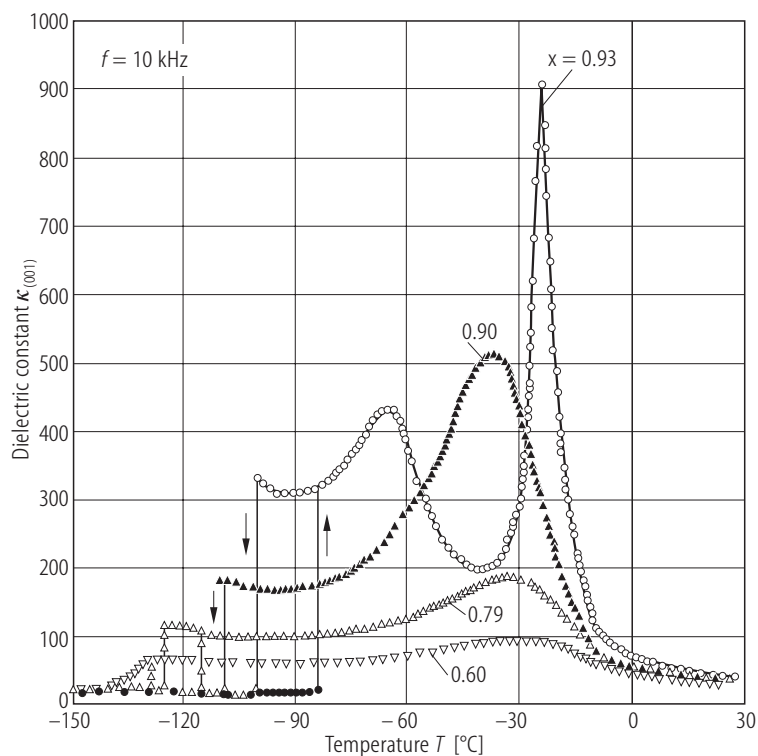


Fig. 42A-1-016. $[(\text{NH}_4)_3\text{H}]_{1-x}[(\text{ND}_4)_3\text{D}]_x(\text{SO}_4)_2$. $\kappa_{(001)}$ vs. T [800sa]. Parameter: x . $\kappa_{(001)}$: dielectric constant of (001) plate specimen.

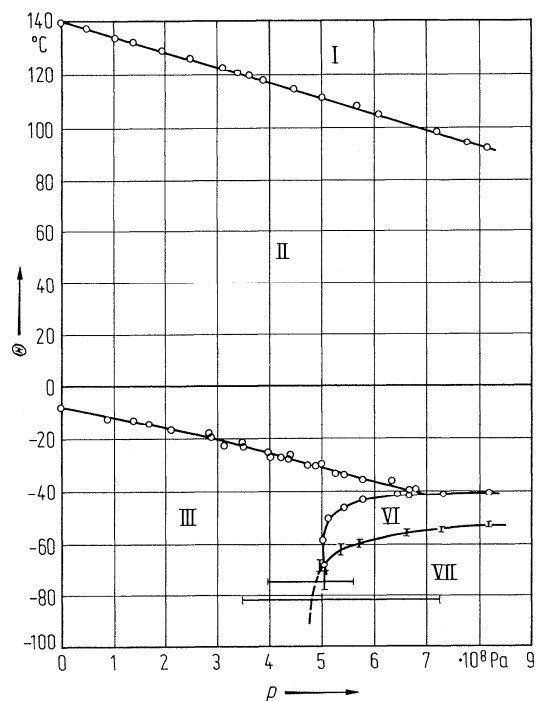


Fig. 42A-1-017. $(\text{NH}_4)_3\text{H}(\text{SO}_4)_2$. Θ vs. p [77Ges1].

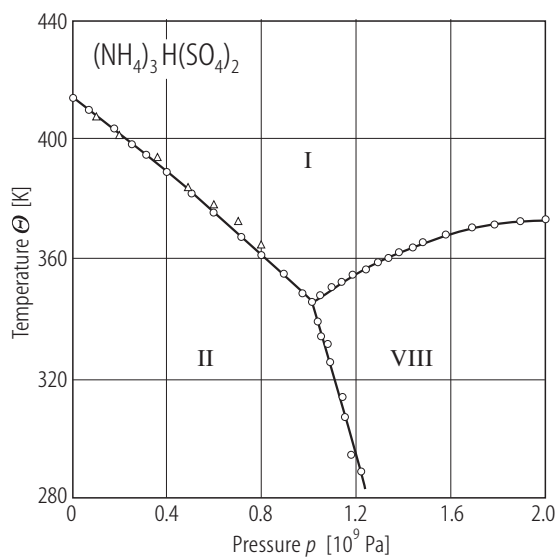


Fig. 42A-1-018. $(\text{NH}_4)_3\text{H}(\text{SO}_4)_2$. Θ vs. p in high-temperature region. Circles: [95Sin], triangles: [77Ges1].

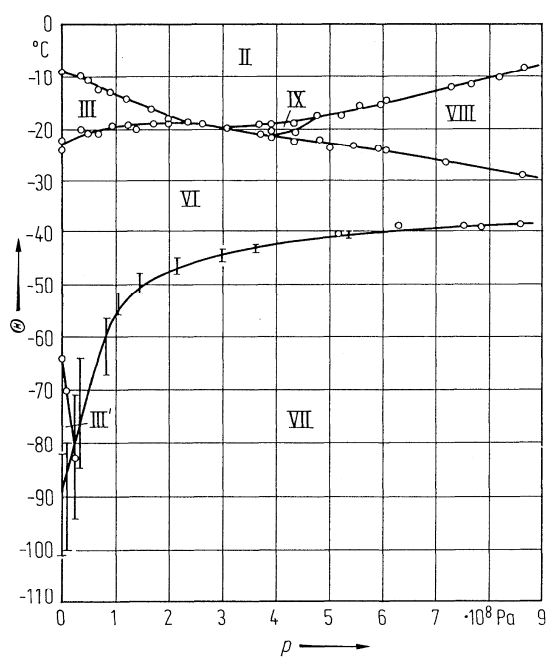


Fig. 42A-1-019. $(\text{ND}_4)_3\text{D}(\text{SO}_4)_2$. Θ vs. p [80Ges2].

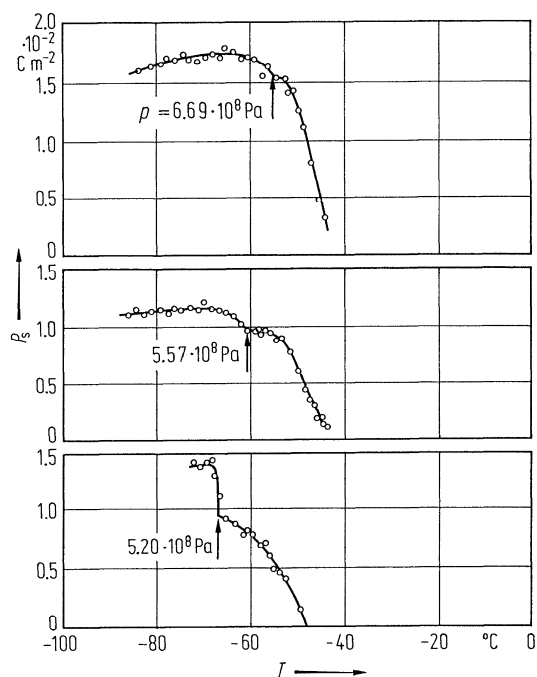


Fig. 42A-1-020. $(\text{NH}_4)_3\text{H}(\text{SO}_4)_2$. P_s vs. T [77Ges2]. Parameter: p . Vertical arrows indicate VII-VI transition.

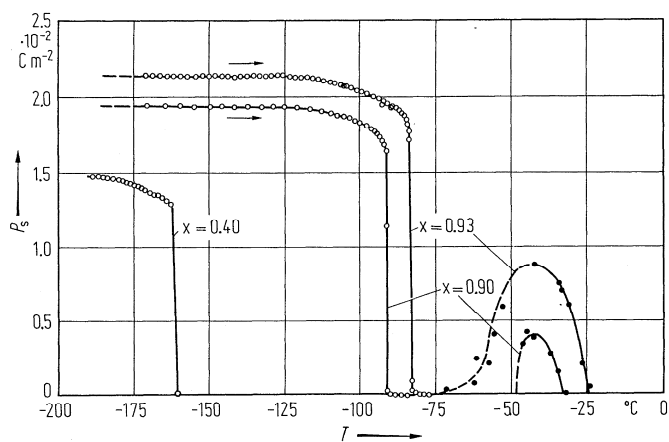


Fig. 42A-1-021. $[(\text{NH}_4)_3\text{H}]_{1-x}[(\text{ND}_4)_3\text{D}]_x(\text{SO}_4)_2$. P_s vs. T [80Osa]. Parameter: x . Full circles: obtained from pyroelectric measurements, open circles: from hysteresis loop measurements.

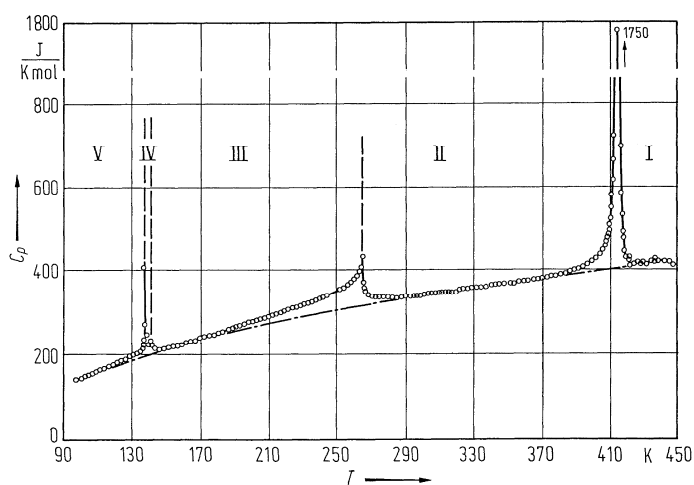


Fig. 42A-1-022. $(\text{NH}_4)_3\text{H}(\text{SO}_4)_2$. C_p vs. T [79Suz1].

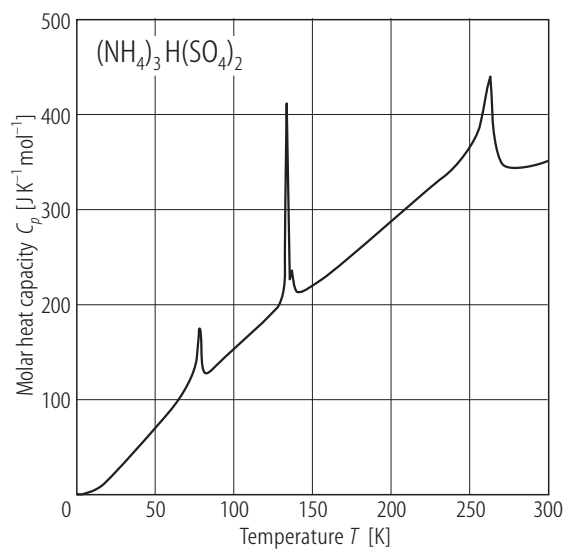


Fig. 42A-1-023. $(\text{NH}_4)_3\text{H}(\text{SO}_4)_2$. C_p vs. T below 300 K [88Kam1].

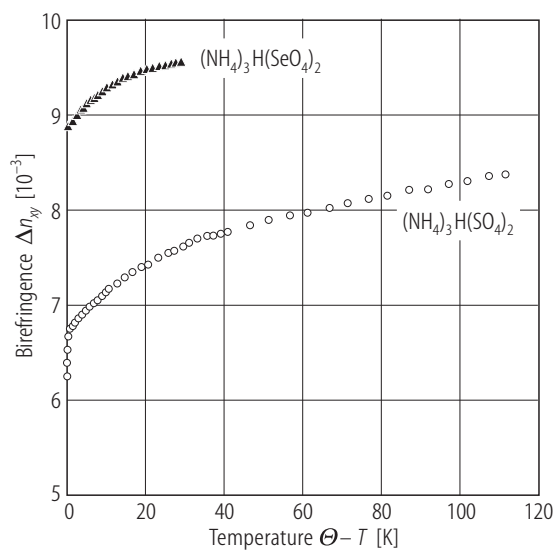


Fig. 42A-1-024. $(\text{NH}_4)_3\text{H}(\text{SO}_4)_2$, $(\text{NH}_4)_3\text{H}(\text{SeO}_4)_2$. Δn_{xy} vs. $\Theta - T$ [91Sch]. $\Theta = \Theta_{\text{II-I}}$ for $(\text{NH}_4)_3\text{H}(\text{SO}_4)_2$, $\Theta = \Theta_{\text{III-II}}$ for $(\text{NH}_4)_3\text{H}(\text{SeO}_4)_2$.

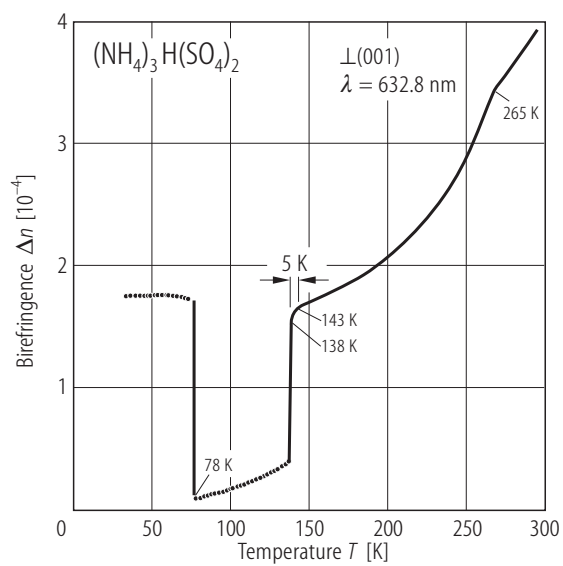


Fig. 42A-1-025. $(\text{NH}_4)_3\text{H}(\text{SO}_4)_2$. Δn vs. T [87Kam]. Light emerges normally to the (001) plane. Transition temperatures are shown in the figure.

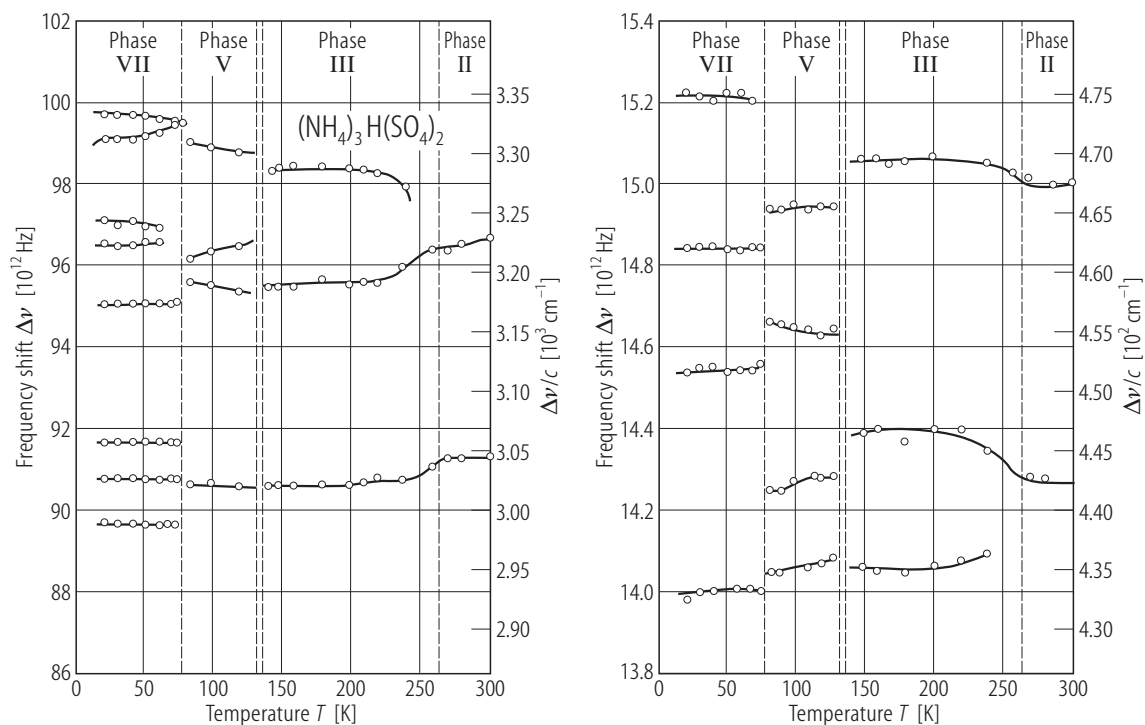


Fig. 42A-1-026. $(\text{NH}_4)_3\text{H}(\text{SO}_4)_2$. $\Delta\nu$ vs. T [88Kam3]. $\Delta\nu$: Raman scattering frequency shift.

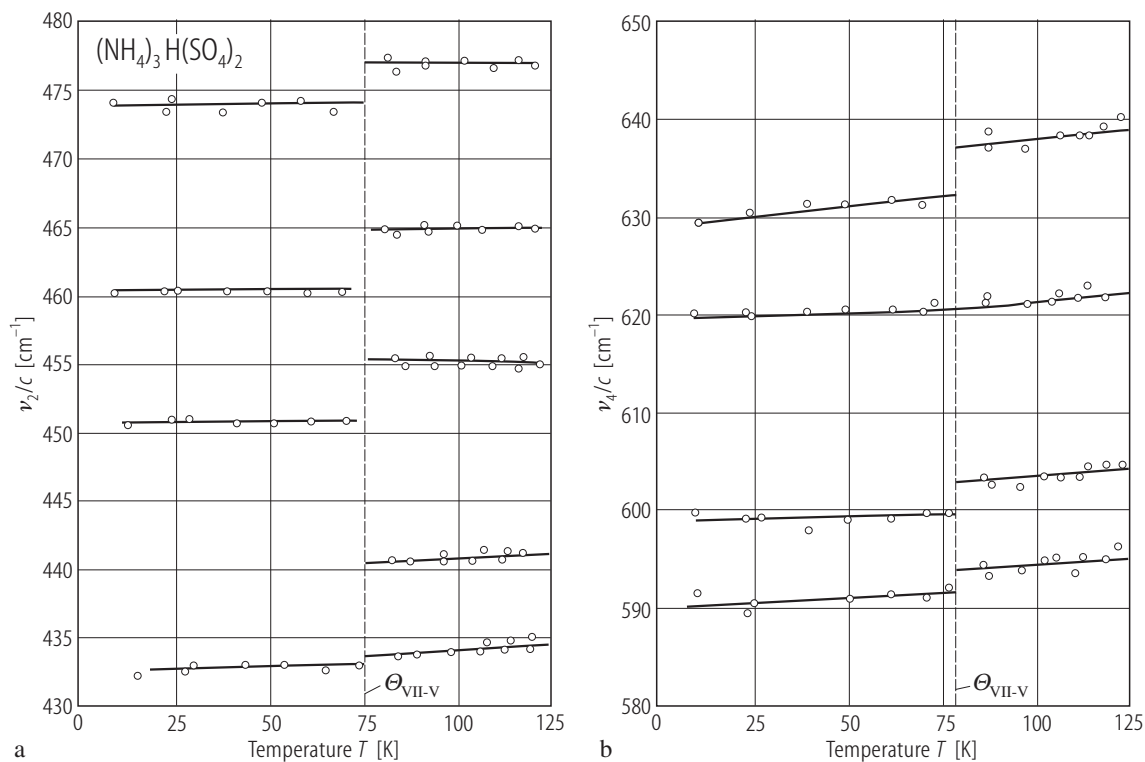


Fig. 42A-1-027. $(\text{NH}_4)_3\text{H}(\text{SO}_4)_2$. ν/c vs. T [88Kam1]. ν : frequency of (a) ν_2 and (b) ν_4 modes of SO_4^{2-} .

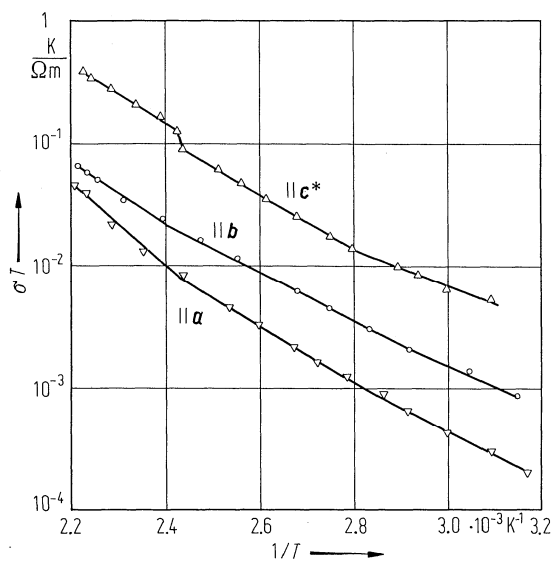


Fig. 42A-1-028. $(\text{NH}_4)_3\text{H}(\text{SO}_4)_2$. σT vs. $1/T$ along a , b , c^* directions [82Red]. σ : electrical conductivity.

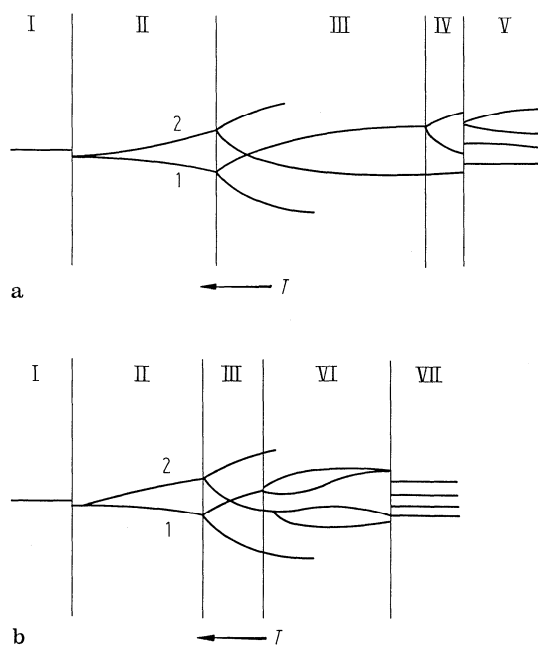


Fig. 42A-1-029. $(\text{NH}_4)_3\text{H}(\text{SO}_4)_2$, $(\text{ND}_4)_3\text{D}(\text{SO}_4)_2$. Splitting scheme of ESR signal of VO^{2+} [84Min].
(a) $(\text{NH}_4)_3\text{H}(\text{SO}_4)_2$, (b) $(\text{ND}_4)_3\text{D}(\text{SO}_4)_2$.