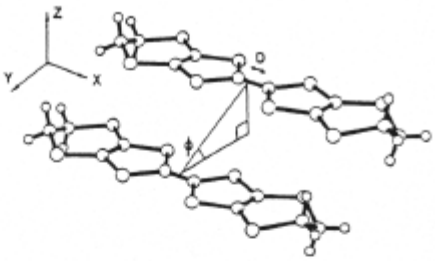

Fig.G1. Definition of "molecular coordinates": X along the molecular long axis, Y along the molecular short axis in the molecular plane, Z perpendicular to the molecular plane, $D = \Delta X$,and $\tan\phi = Z/Y$.

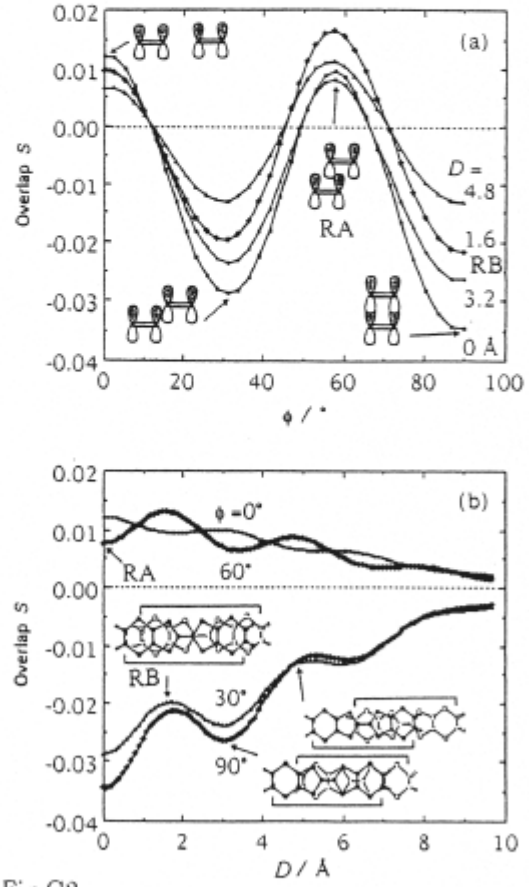

Fig.G2. (a) Overlap integrals between HOMO's of ET as a function of ϕ for several D. The molecules are moved as shown in Fig. 1(b). (b) Overlap integrals as a function of D. These values are calculated at Y = 6.6 Å, Z = 0.0 Å for ϕ = 0°, Y = 6.14 Å, Z = 1.70 Å for ϕ = 30°, Y = 5.00 Å, Z = 2.88 Å for ϕ = 60°, and Y = 0.0 Å, Z = 3.6 Å for ϕ = 90°.

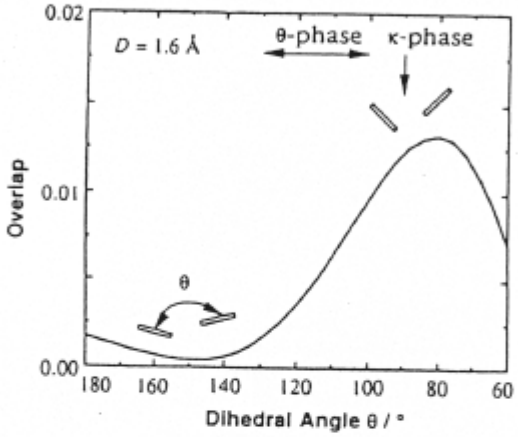

Fig.G3. Overlap integral of two inclined ET molecules as a function of the dihedral angle, θ . The positions of the molecules are moved according to the change of the lattice constants in the actual θ -phases.

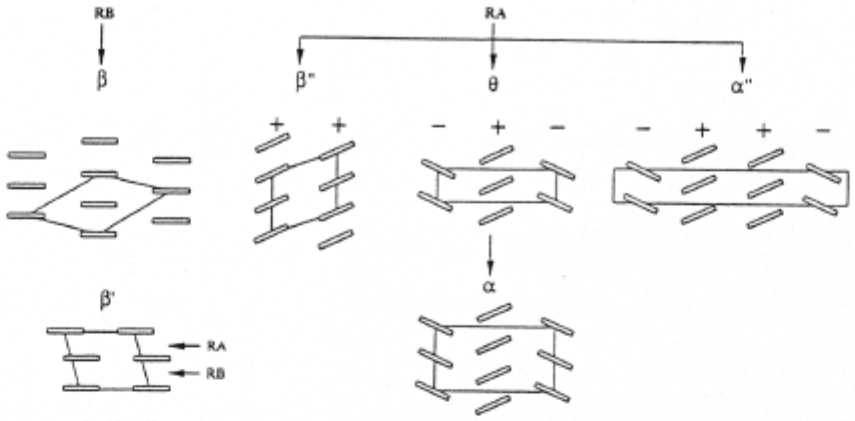

Fig.G4. Genealogy of β, β', β'', θ, α, and α''-phases; the packing patterns of the donor sheets are viewed along the molecular long axis.

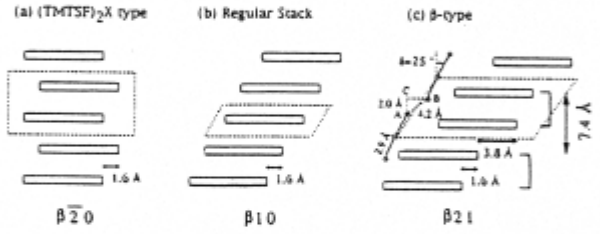

Fig.G5. Stacking patterns of (a)$(TMTSF)_2X$, (b)regular chain in (TTF)(TCNQ), and (c) the β-phase, viewed along the molecular short axis.

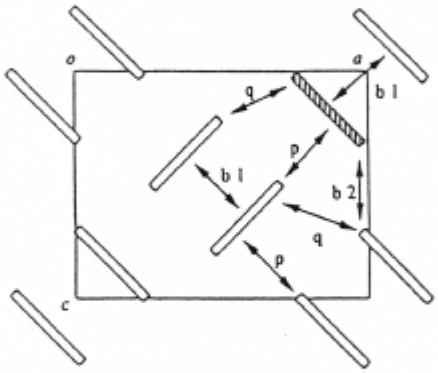

Fig.G6. Structure of the donor sheet in κ-$(ET)_2Cu[N(CN)_2]Br$, viewed along the molecular long axis.

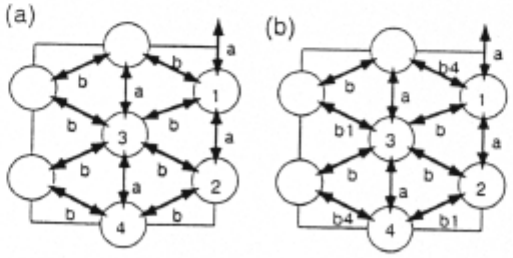

Fig.G7. Model donor structures.