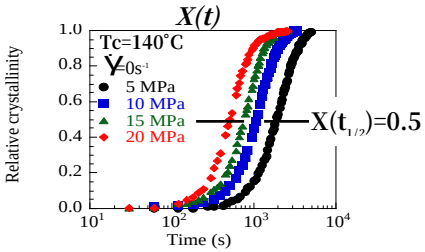

Fig. 2 Time development of relative crystallinity at 140 under various pressures($\dot{\gamma}=0s^{-1}$).

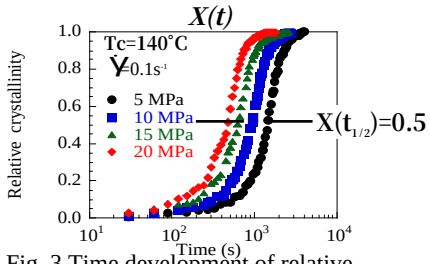

Fig. 3 Time development of relative crystallinity at 140 under various pressures($\dot{\gamma}=0.1s^{-1}$).

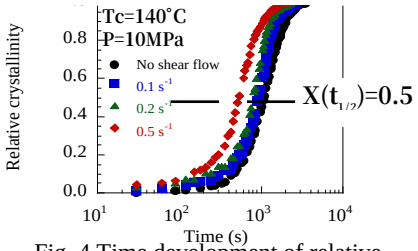

Fig. 4 Time development of relative crystallinity at 140 under various shear rates(P=10MPa).

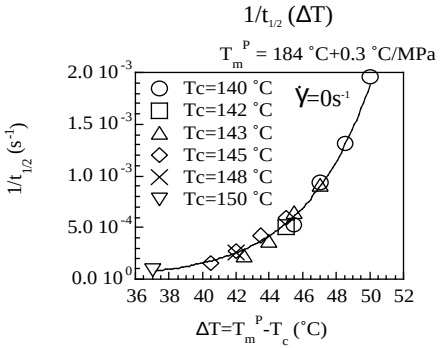

Fig. 5 Crystallozation rate $1/t_{1/2}$ under no shear flow as a function of super cooling $T_m^P-T_c$.

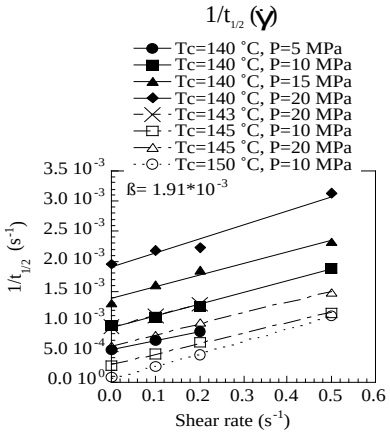

Fig. 6 Crystallozation rate $1/t_{1/2}$ as a function of shear rate.

β: independent of T_c, P

(140˚C<T_c<150˚C)

($0s^{-1}<\dot{\gamma}<0.5s^{-1}$)

(5MPa<P<20MPa)

$$\beta=\frac{1}{\gamma_c}$$

$$\frac{1}{t_{1/2}(T,P,\dot{\gamma})}\approx\frac{1}{t_{1/2}(T_m^P-T_c)}+\frac{\dot{\gamma}}{\gamma_c}$$

[Apparatus]

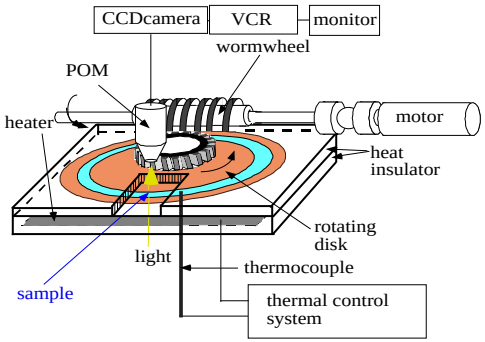

Fig.7 The device for direct observation

[Measurement]

Temperature (˚C)	135, 137, 140
Shear rate (s^{-1})	0, 0.05, 0.1, 0.2

[Conclusion]

[Under High Pressure and Shear(PVT measurement system)]

- Effect of pressure can be described by the shift of the supercooling$T_m^P-T_c$.
- Effect of pressure can be described by the flow-induced strain independent of crystallization temperature and pressure.
- $1/t_{1/2}$ is described by the sum of crystallization rate under no shear and under shear flow,

$$\frac{1}{t_{1/2}(T,P,\dot{\gamma})}\approx\frac{1}{t_{1/2}(T_m^P-T_c)}+\frac{\dot{\gamma}}{\gamma_c}\qquad \gamma_c=500$$

(140˚C<T_c<150˚C) ($0s^{-1}<\dot{\gamma}<0.5s^{-1}$) (5MPa<P<20MPa)

[Under Shear(Direct observation system)]

- Isolated spherulites
- Enhanced nucleation rate
- Growth rate is only weakly enhanced

(135˚C<T_c<140˚C) ($0s^{-1}<\dot{\gamma}<0.2s^{-1}$)