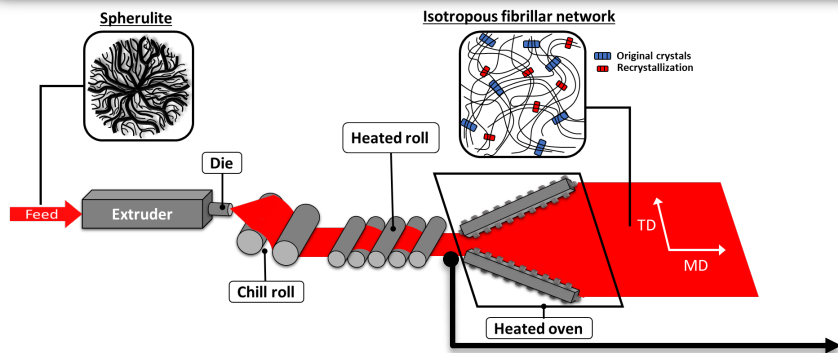




Biaxial orientation improves film properties, and it could allow to replace multilayer technology with new well-designed PE-based monomaterials



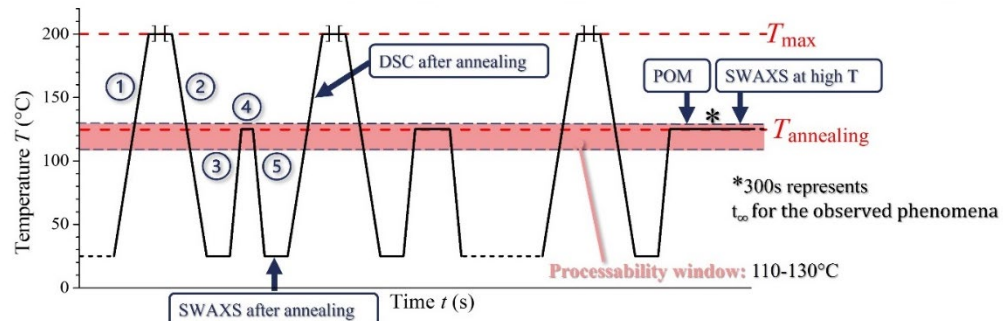
What is the effect of tentering temperature in the early stages of the process?

Aim: Understanding the effect of processing parameters on the structural evolution of PE since the early stage.

PER-MANENT

A microstructural insight in PolyEthylene based bioRiented mono-Materials: from fuNdamENTal to processing

Ph.D. Student: Adriano Guida



Erasing thermal history/creating standard state

- ① Heating (10°C/min)
- ② Cooling (10°C/min)

Annealing for different times: from 1s to 300s

- ③ Heating (40°C/min)
- ④ Isotherm at $T_{\text{annealing}}$
- ⑤ Cooling (40°C/min)