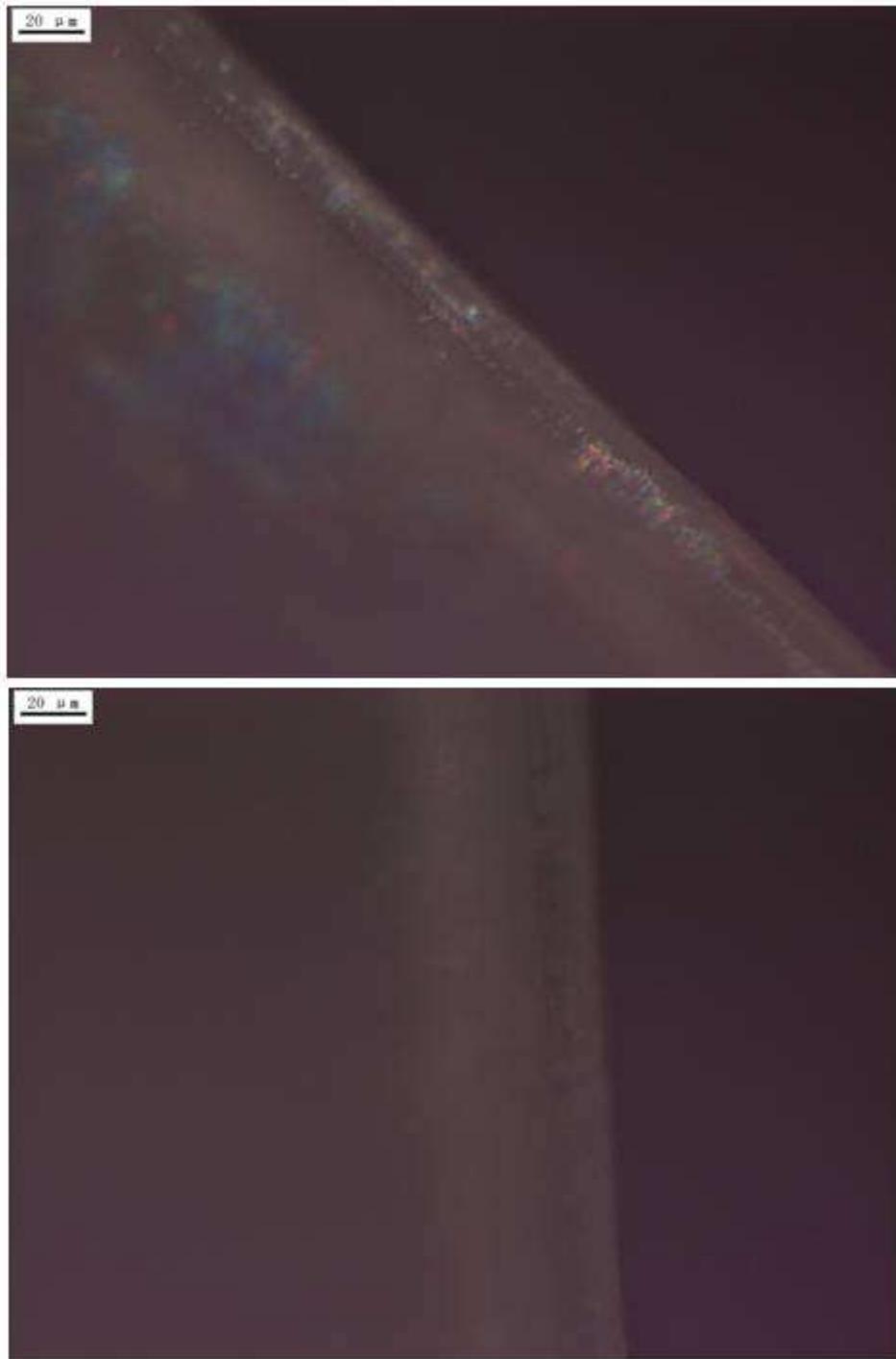
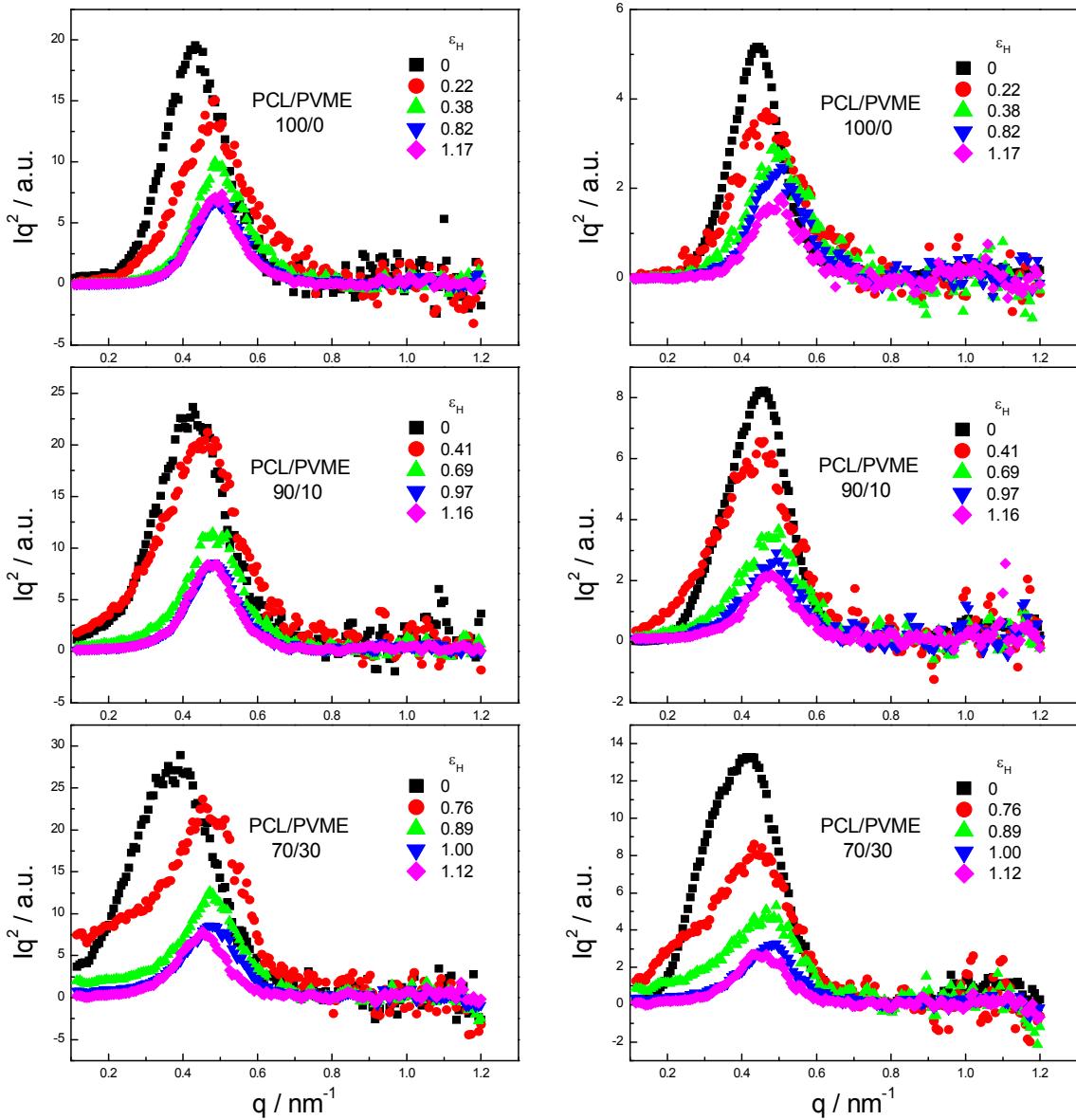


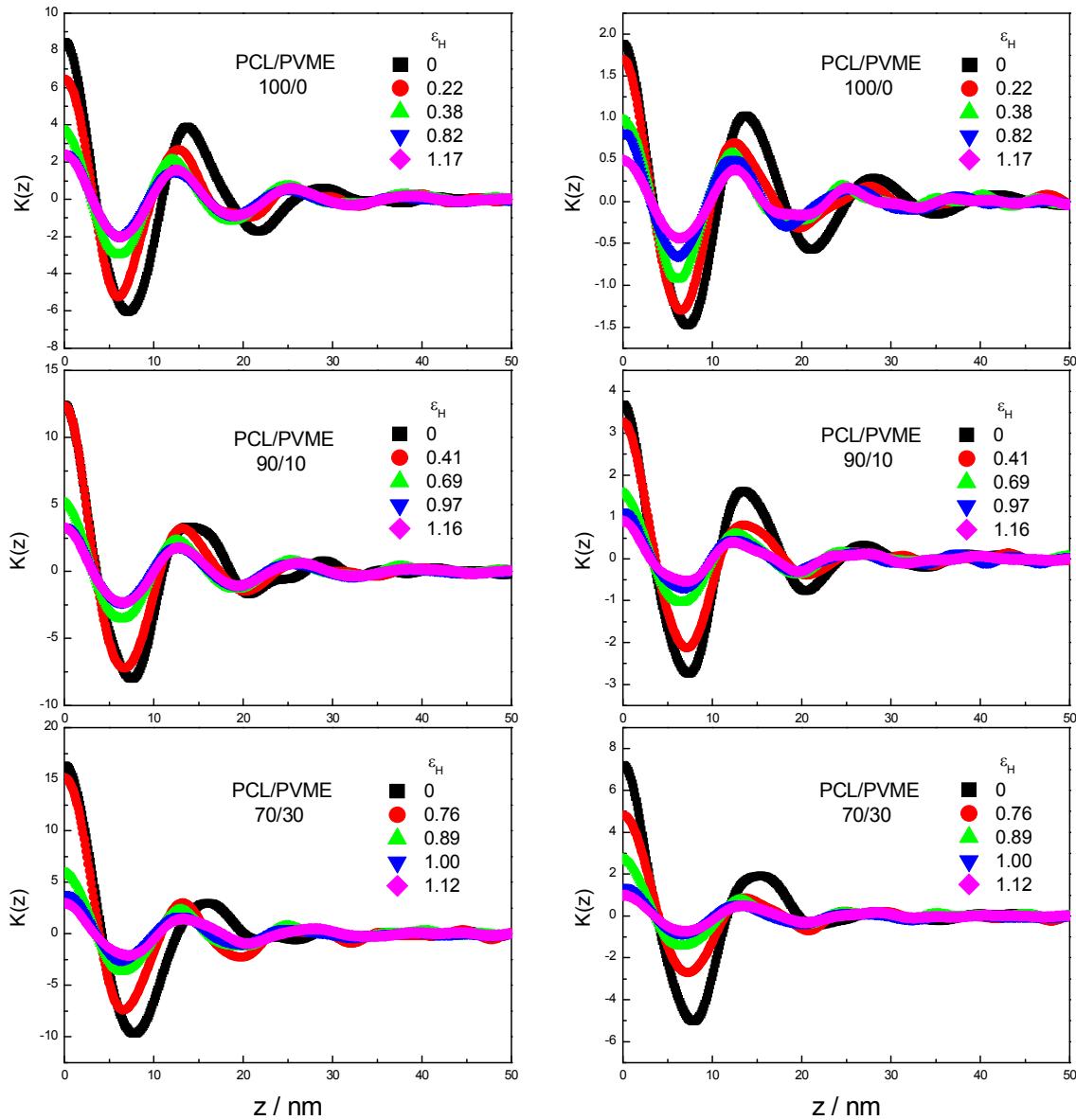
**Figure S1.** Azimuthal intensity distribution of the 110-reflection measured for the micro-molded PCL/PVME blends as a function of distance from the surface. Only one half of the data is presented for the sake of clarity.



**Figure S2.** Optical images of the oriented skin layers of micro-molded PCL sample at position close to the middle of sample viewed between crossed polars at 45° (top) and 90° (bottom) with respect to the flow direction.



**Figure S3.** One-dimensional scattering intensity distribution profiles for the core (left) and skin layers (right) of micro-molded PCL/PVME blends taken along the stretching direction at different deformations.



**Figure S4.** One-dimensional correlation functions for the core (left) and skin layers (right) of micro-molded PCL/PVME blends taken along the stretching direction at different deformations.