9. Outlook

In order to fully clarify the issues raised in the course of this study, the future works should be concentrated on the following points.

1. In order to determine the critical size of the EVA particles and the critical particle-particle distance, a systematic study on blends containing more than 8.9 wt.-% EVA would be necessary.

2. Fracture mechanics investigations could be helpful for evaluating the material resistance against unstable and stable crack propagation and afterwards to develop a model for the long-term ESC behavior of the blends.

3. Additional WAXS and SAXS investigations are necessary for determination of any changes in lamellae arrangement as a result of the long thermal treatment during the ESCR test.

4. It would be helpful to investigate the ESCR of the blends by applying a constant load test, to compare the failure times and the resulting deformation and failure mechanisms of the samples tested at both constant stress and constant strain. Afterwards, to select a test method which gives more reliable results and a shorter test-time procedure, that would be applied in industrial conditions for routine investigations of the ESCR of PE/EVA blends.