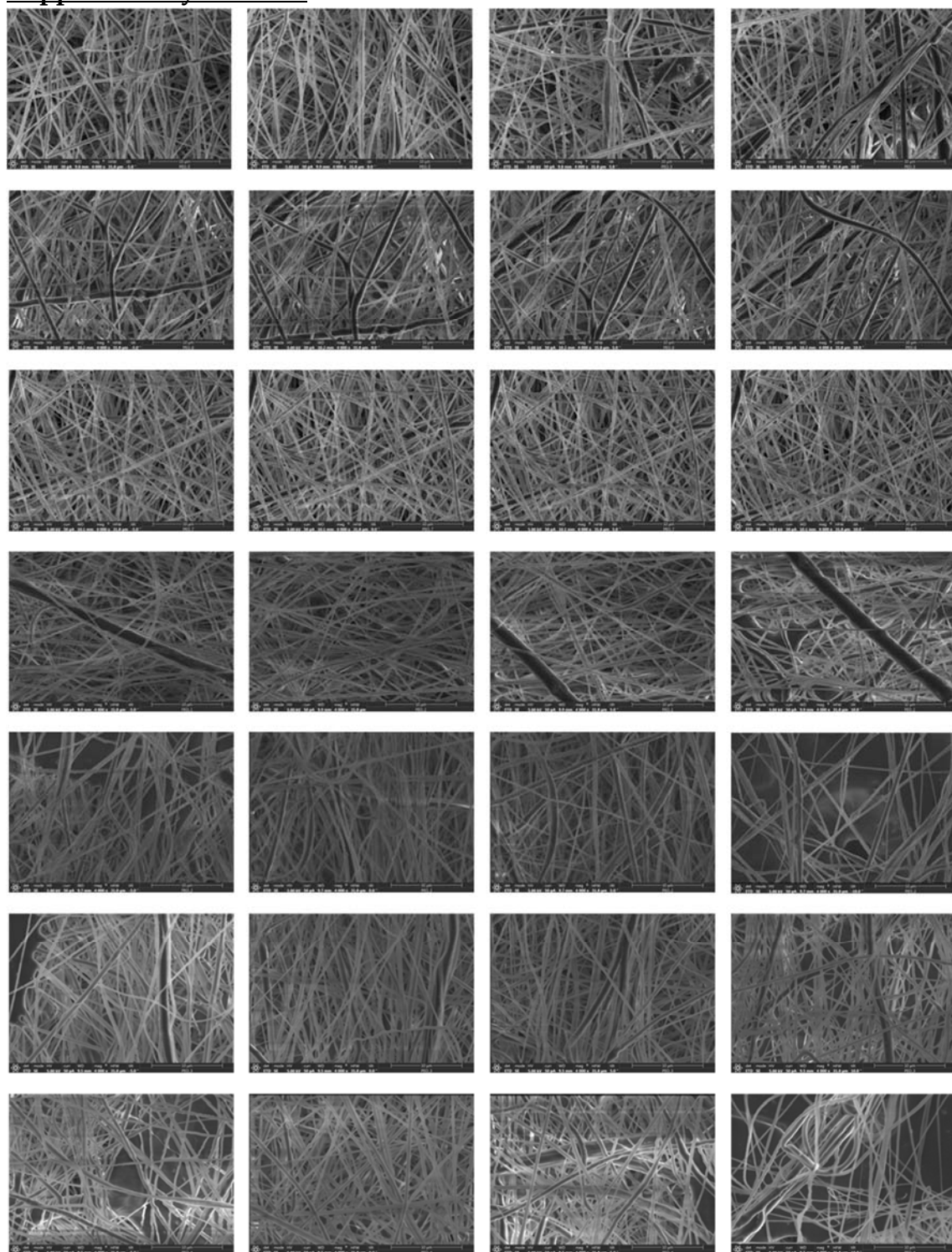


## Supplementary Material



**Figure S1.** SEM images of the different PEO developed materials with a 4000x magnification at different tilts. Columns (from left to right) represent the different tilt angles: -5, 0, 5 and 10 degrees; whereas rows (from top to bottom) represent the different materials: PEO-46, PEO-55, PEO-64, PEO-73, PEO-82, PEO-91 AND PEO-100.

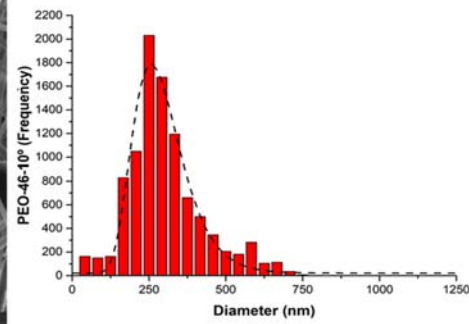
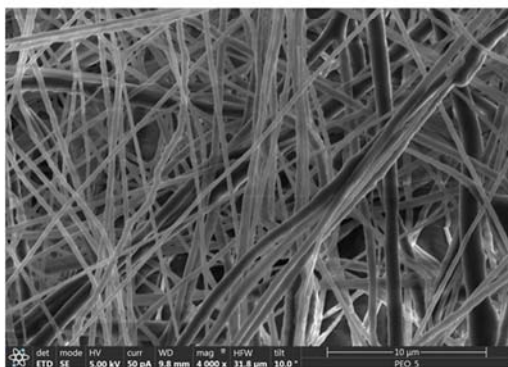
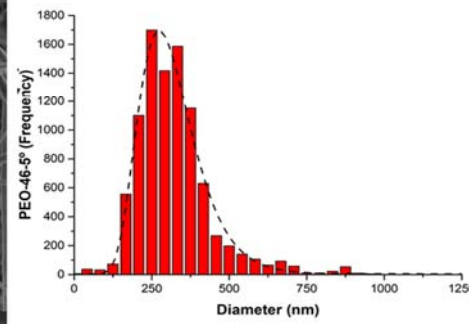
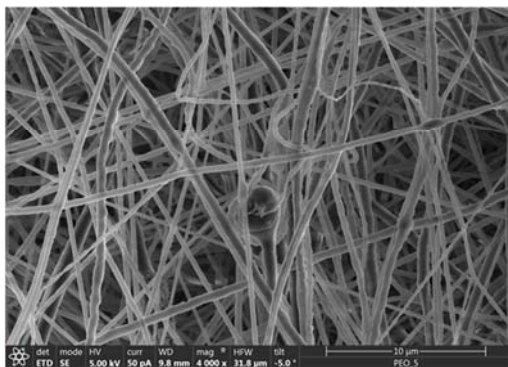
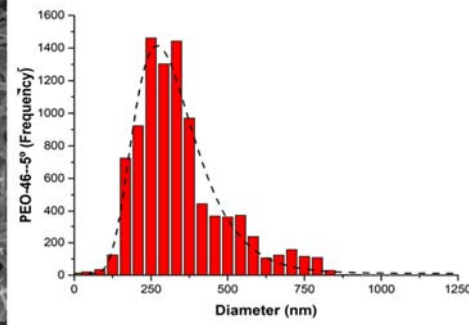
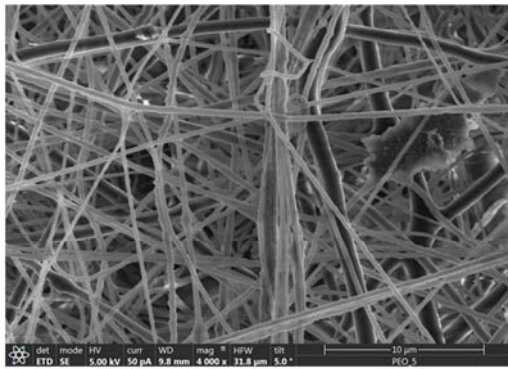
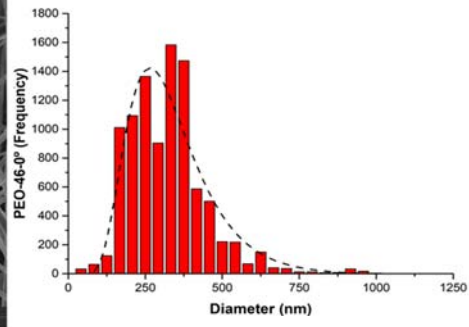
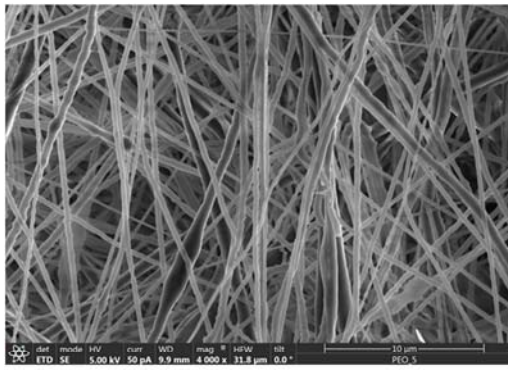
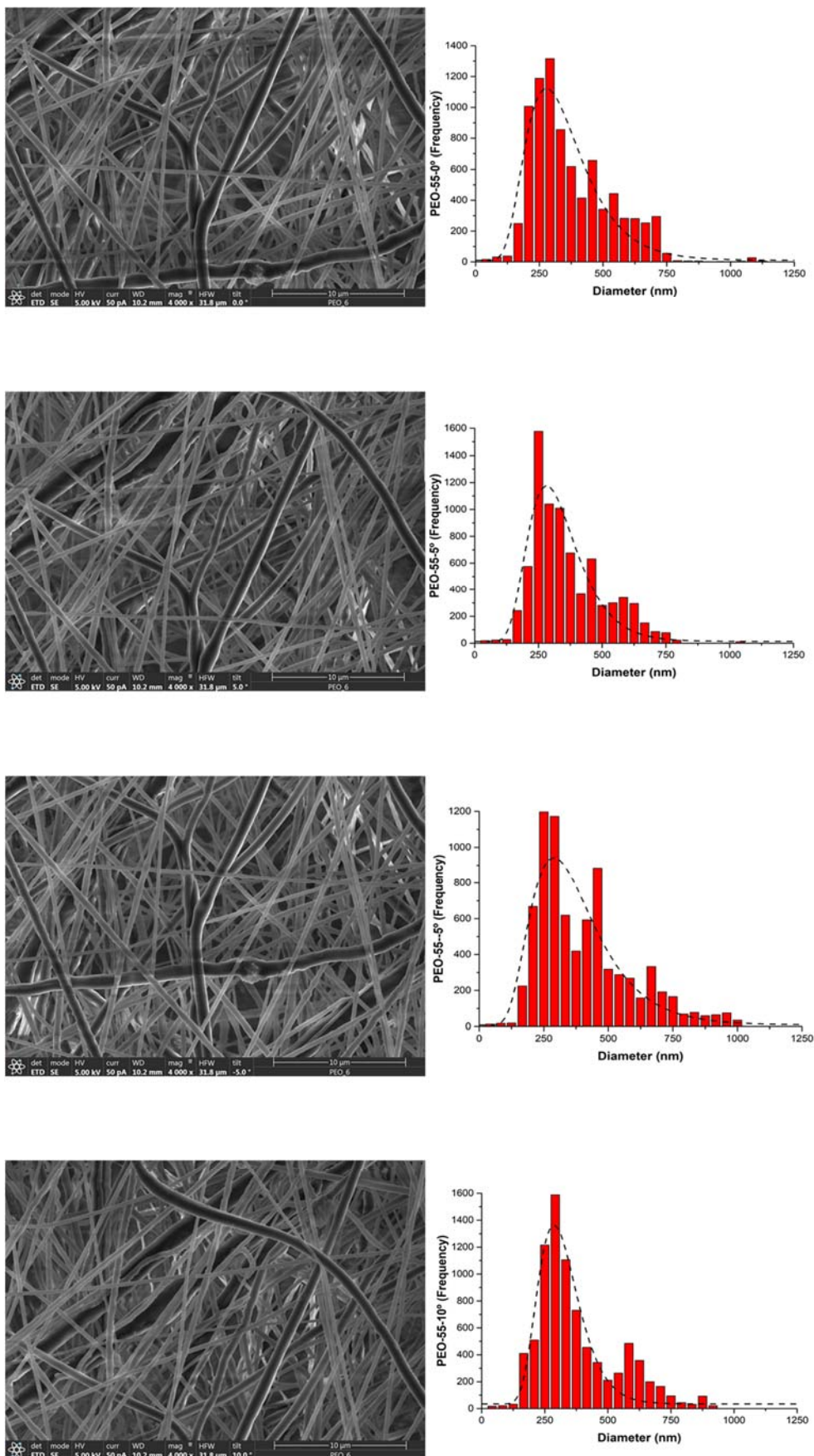
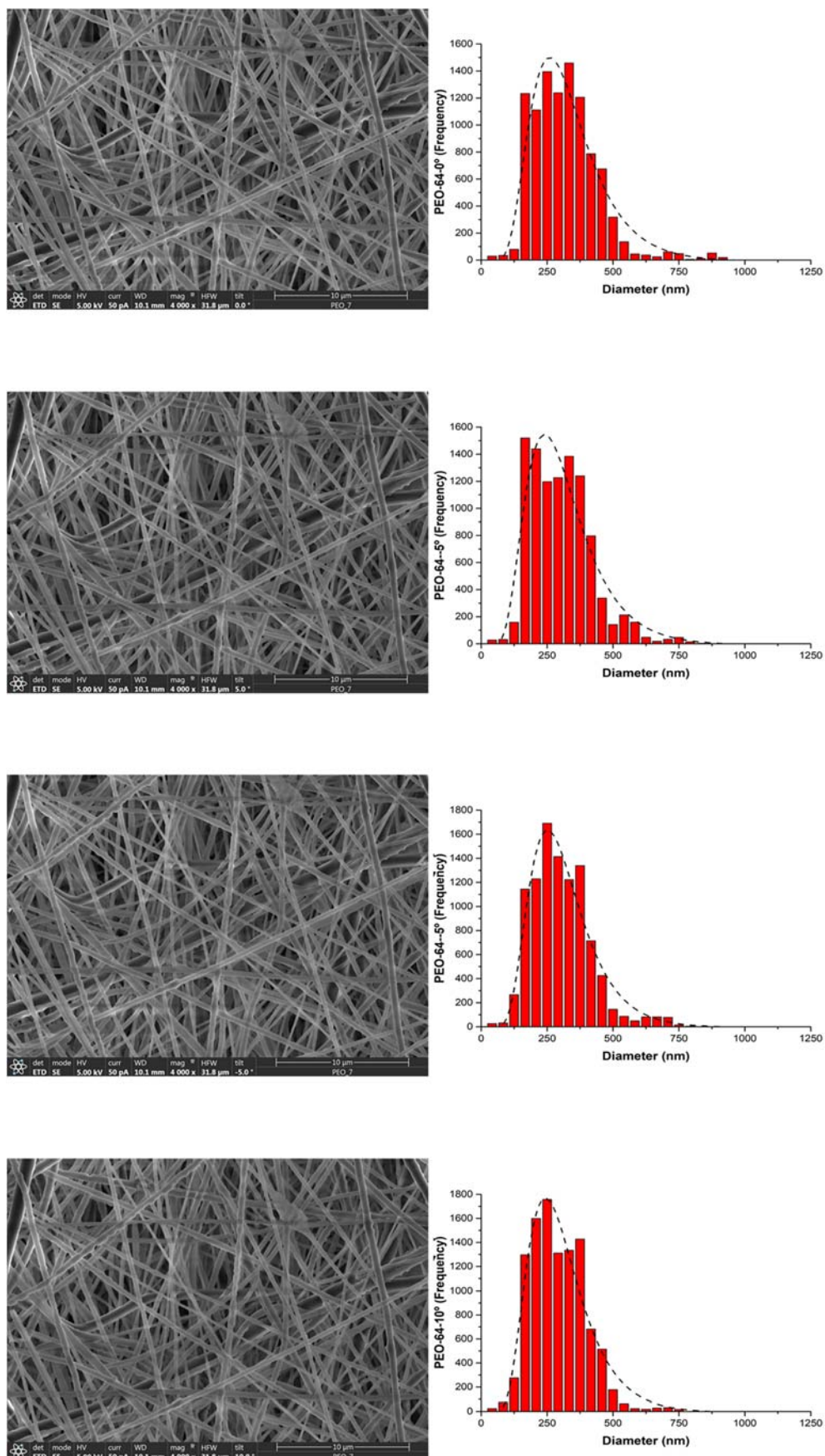


Figure S2. Fiber size distributions of PEO-46 as a function of the tilt.

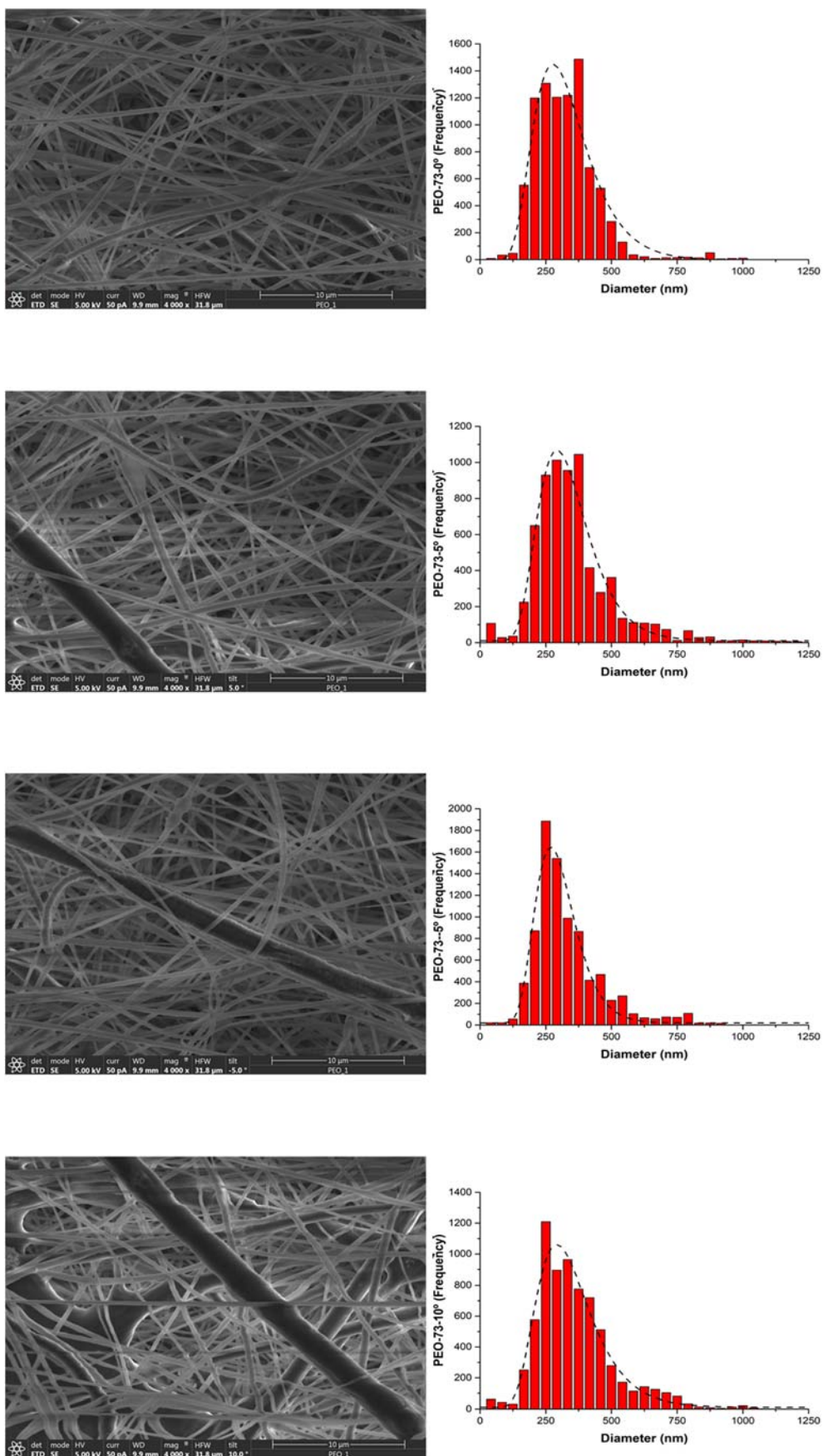


*Figure S3. Fiber size distributions of PEO-55 as a function of the tilt.*

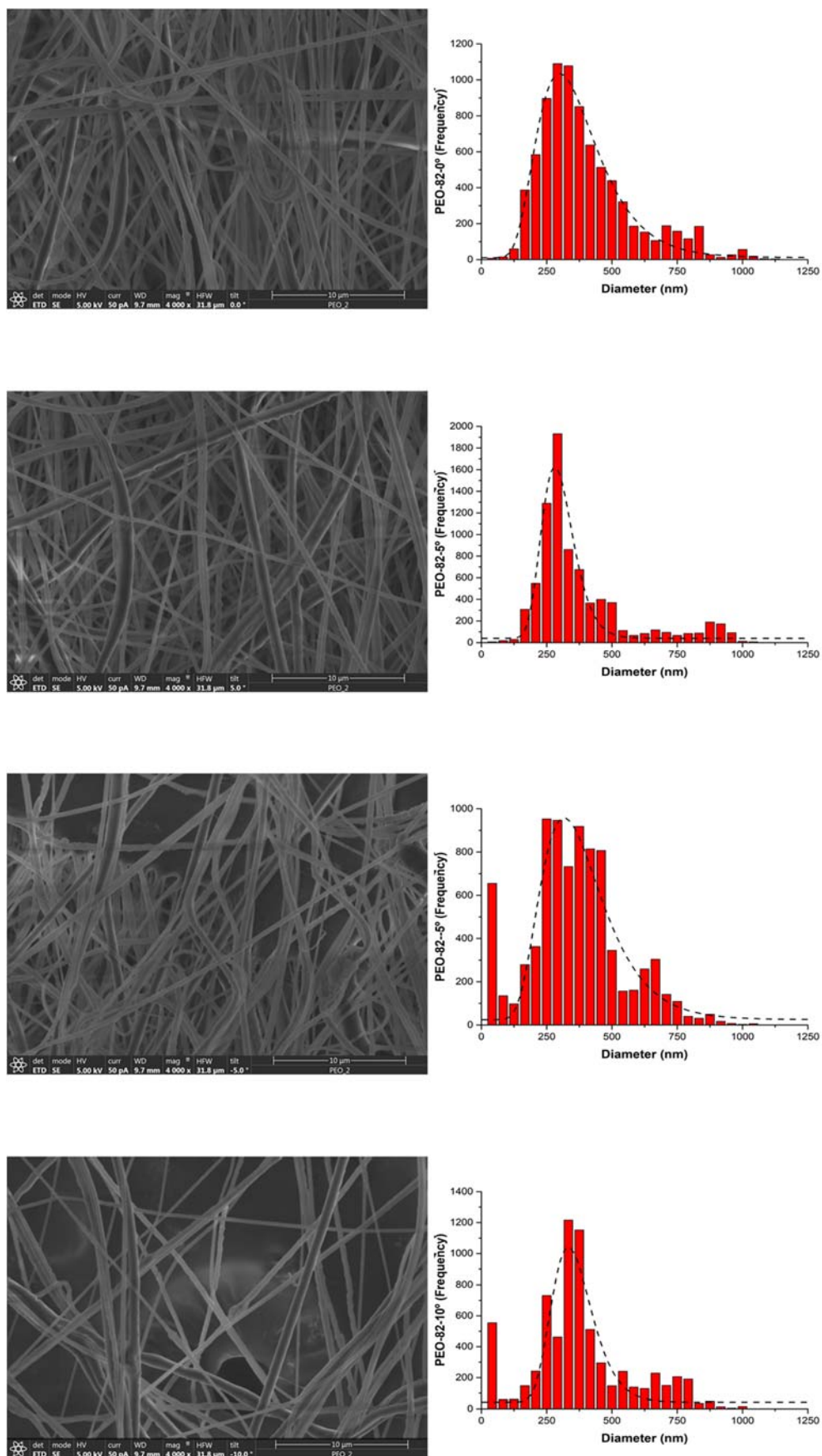




*Figure S4. Fiber size distributions of PEO-64 as a function of the tilt.*



*Figure S5. Fiber size distributions of PEO-73 as a function of the tilt.*



*Figure S6. Fiber size distributions of PEO-82 as a function of the tilt.*



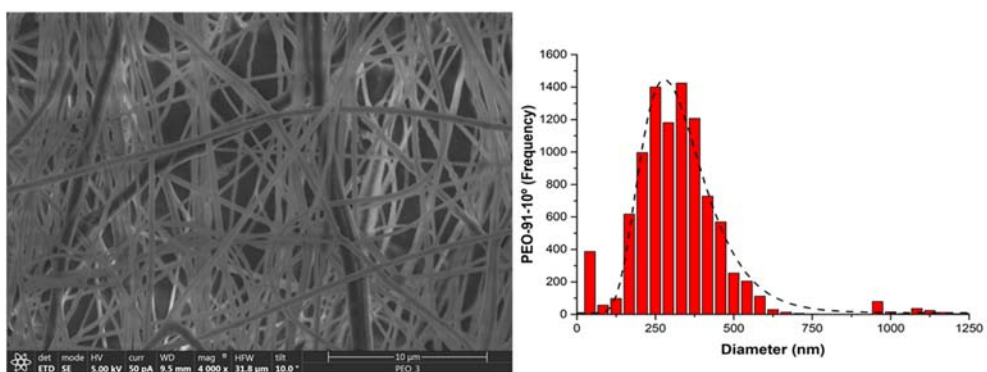
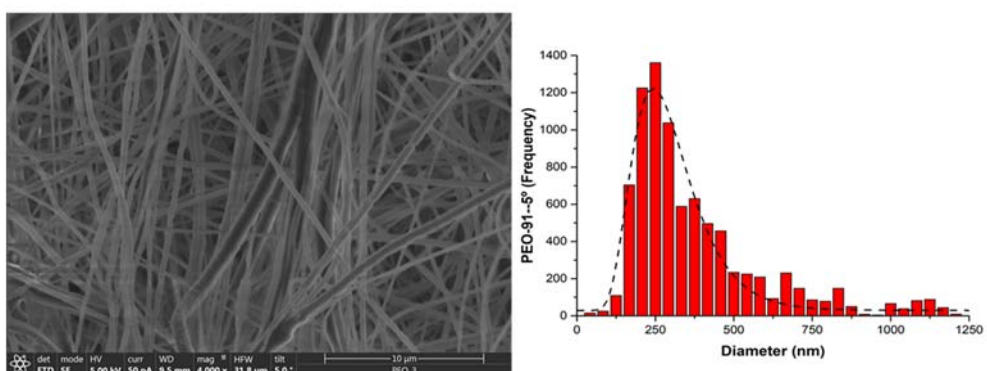
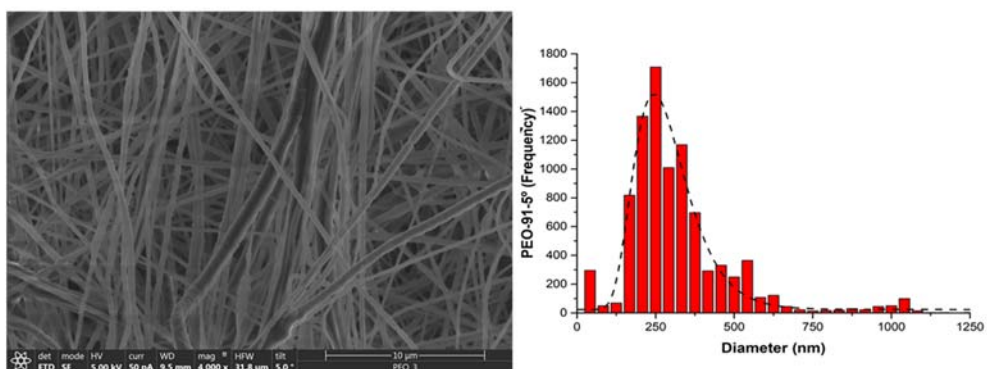
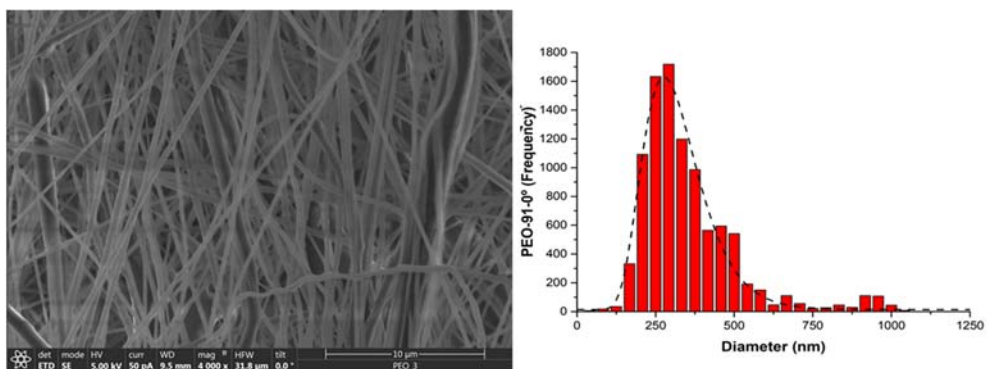


Figure S7. Fiber size distributions of PEO-91 as a function of the tilt.

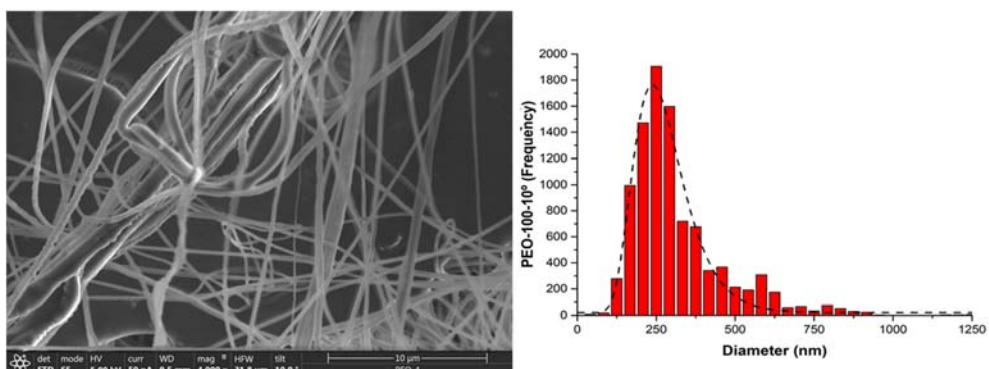
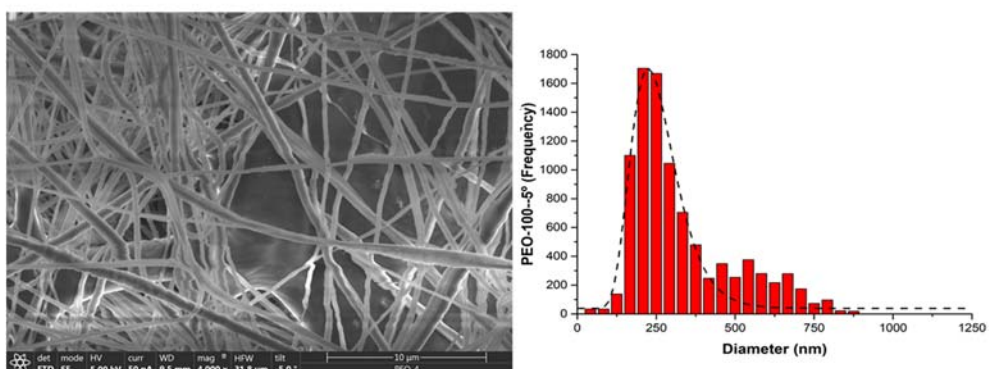
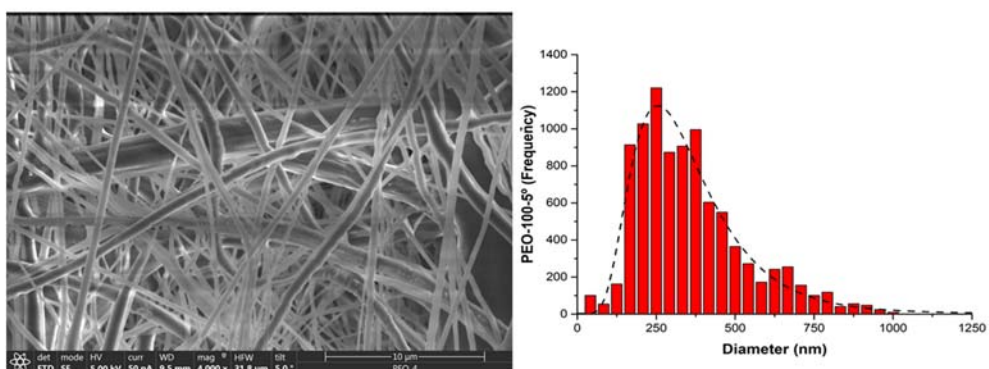
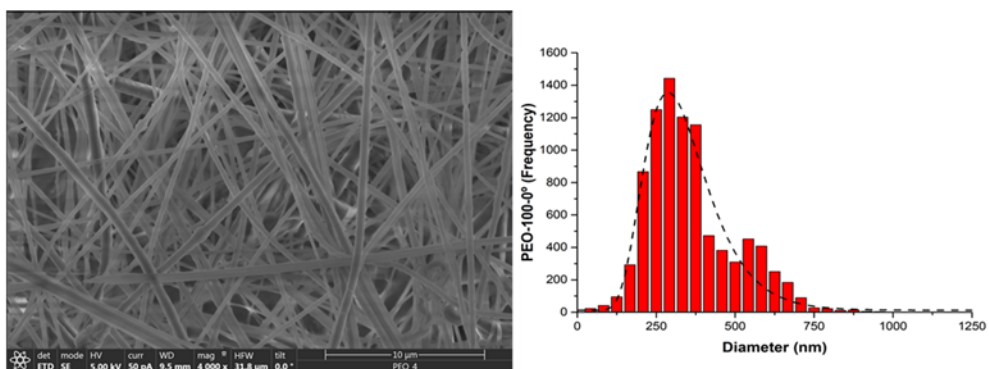


Figure S8. Fiber size distributions of PEO-100 as a function of the tilt.



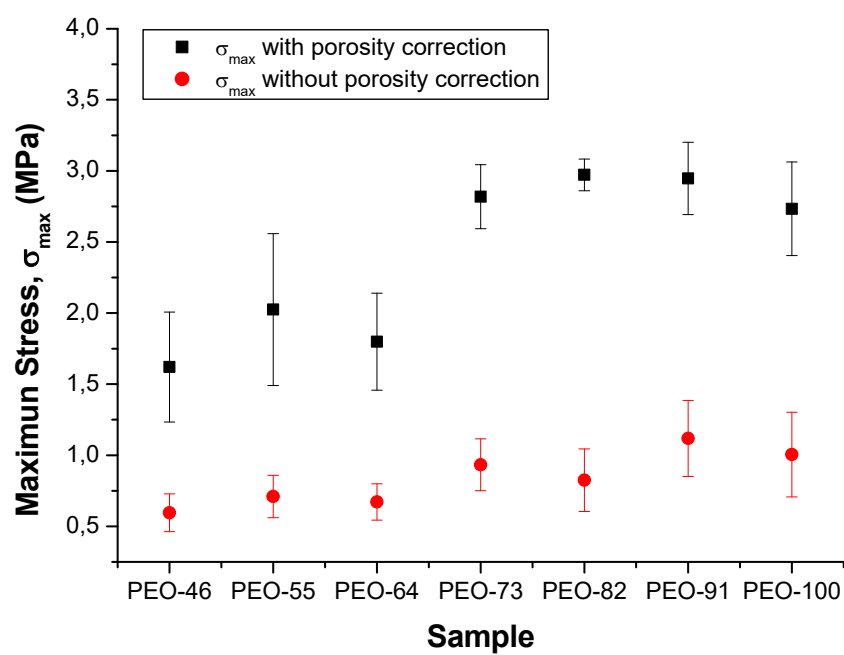


Figure S9. Maximum stress as a function of PEO based material.

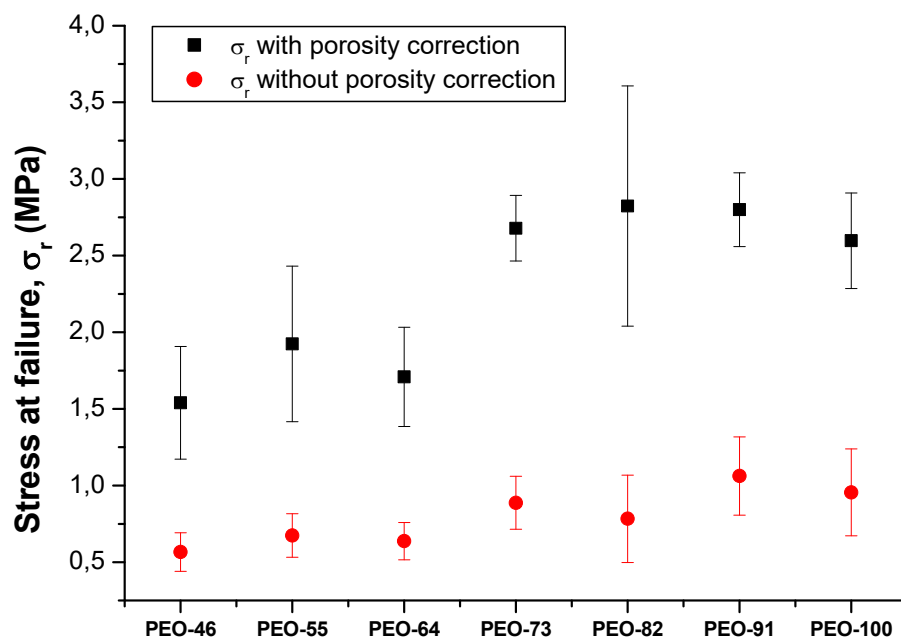
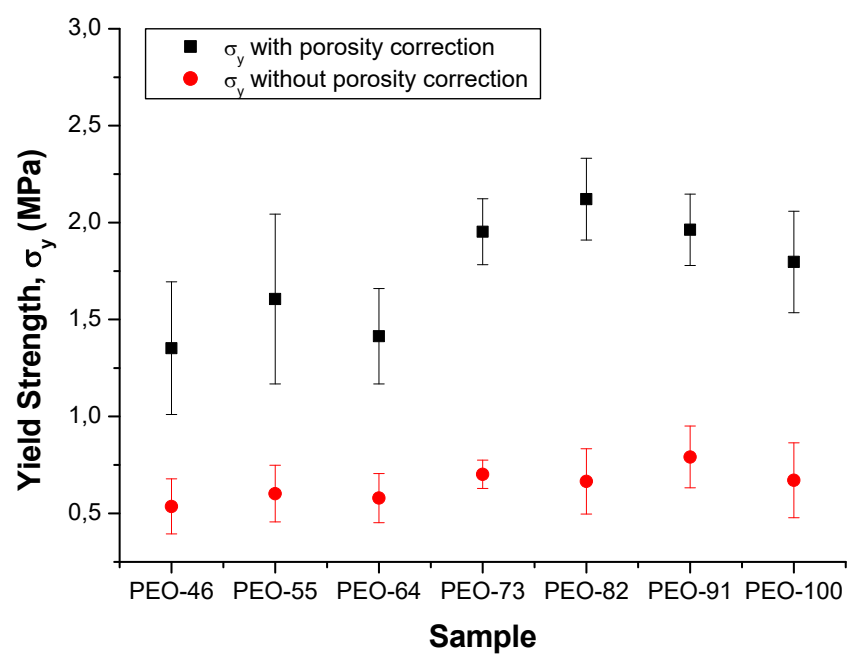


Figure S10. Stress at failure as a function of PEO based material.



*Figure S11. Yield stress as a function of PEO based material.*