

Linker layer deposition for protein immobilization on a polymer membrane

Customer Challenge

Current process is not ideal

- Multi-step batch process – inefficient
- Large chemical consumption – Wet-chemical -

Solution

Grafting of a nano-linker-layer onto the polymer with a solvent-free Molecular Plasma solution in a roll-to-roll process for subsequent protein immobilization

Results

- ✓ Continuous roll-to-roll application → increase efficiency
- ✓ Proteins bound to linker layer maintain functionality
- ✓ Cost Reduction through 100x reduction in chemical consumption
- ✓ Reduce process complexity