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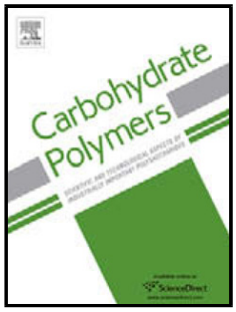

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Application of response surface methodology to tailor the surface chemistry of electrospun chitosan-poly(ethylene oxide) fibers

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Highlights

- Development of electrospun chitosan / PEO blend fibers with tailored surface properties.
- Designing of a response surface model (RSM) exhibiting excellent prediction accuracy.
- Chitosan fibers exhibiting tailored nitrogen atomic surface content of up to 6.4%.
- Nitrogen surface content is significantly determined by chitosan Mw and polymers mixing ratio.
- Nitrogen surface content strongly influences the membranes zeta potential.

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