

## Accepted Manuscript

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# Stable pH responsive layer-by-layer assemblies of partially hydrolysed poly(2-ethyl-2-oxazoline) and poly(acrylic acid) for effective prevention of protein, cell and bacteria surface attachment.

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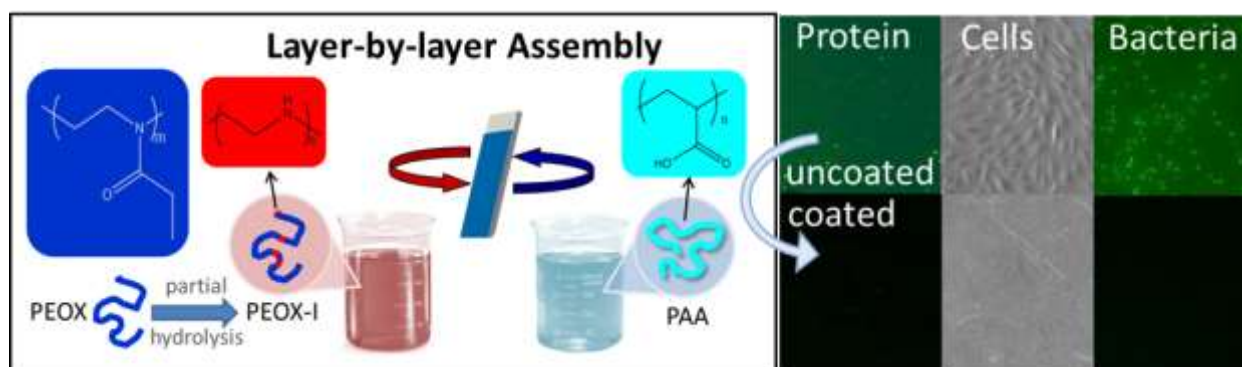
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## Graphical Abstract



**Caption:** Layer-by-layer assemblies of partially hydrolysed poly(2-ethyl-2-oxazoline) (PEOX-I) and poly(acrylic acid) (PAA) provide for effective resistance against surface protein, cell and bacterial attachment.

## Highlights

- A method to create stable coatings of poly(2-ethyl-2-oxazoline) is reported.
- Protein-, cell- and bacteria- attachment can be suppressed by these coatings.
- Coatings exhibit thickness dependent resistance to protein adsorption.
- Optimal coatings (~220 nm thick) provide broad spectrum bio-fouling resistance.

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