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Title: Modelling Drug Release from Polymer-Free Coronary Stents with Microporous Surfaces

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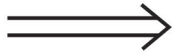
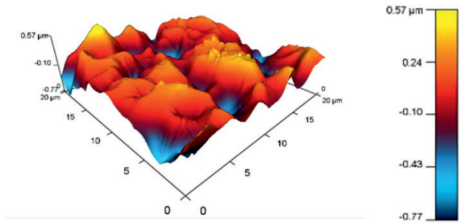
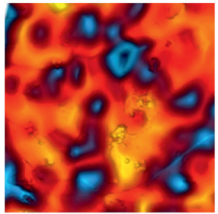
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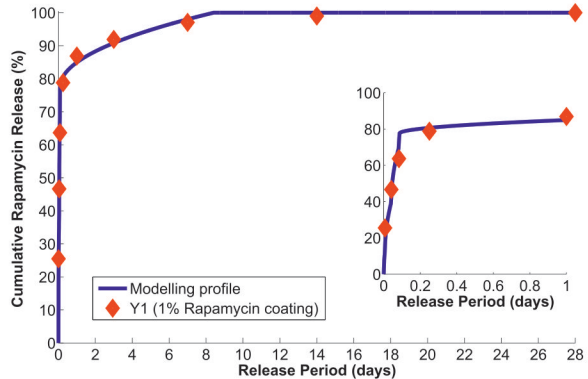
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AFM images of microporous surface of stent

Conduct drug release experiment for stent



Comparison of theory and experiment



Develop a mathematical model for release



$$\frac{\partial b}{\partial t} = -k_d(x)b + k_d(x)c$$

$$\frac{\partial c}{\partial t} = D \frac{\partial^2 c}{\partial x^2} + k_a(x)b - k_d(x)c$$

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