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Functionalizable molecular tubing synthesis combining self-immolative polymers and rotaxanes

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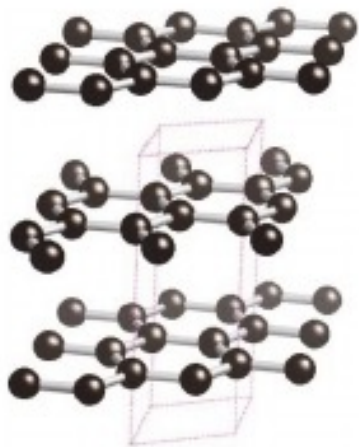


Functionalizable molecular tubing synthesis combining self-immolative polymers and rotaxanes

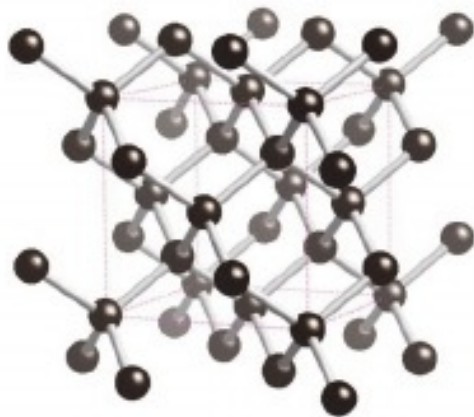
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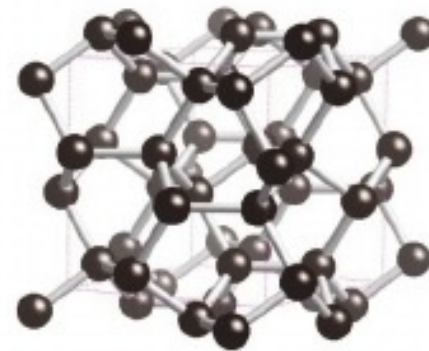
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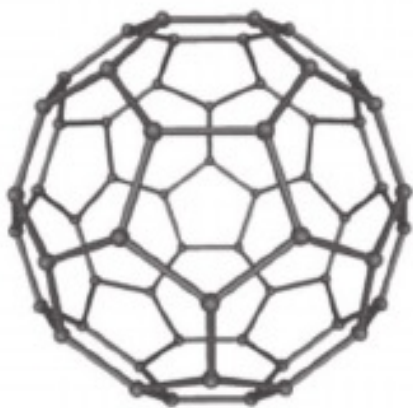
graphite



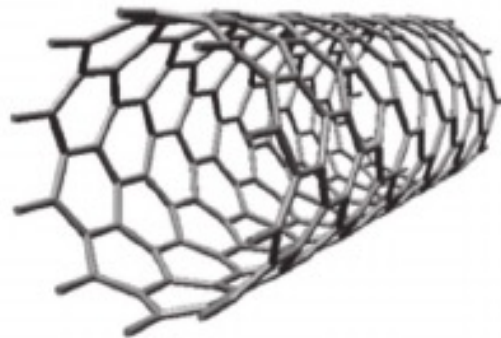
diamond



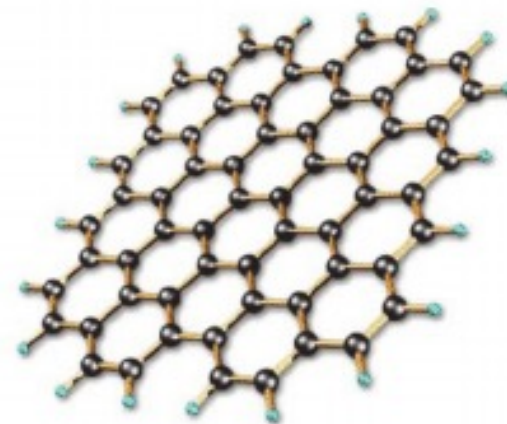
BC8



fullerene



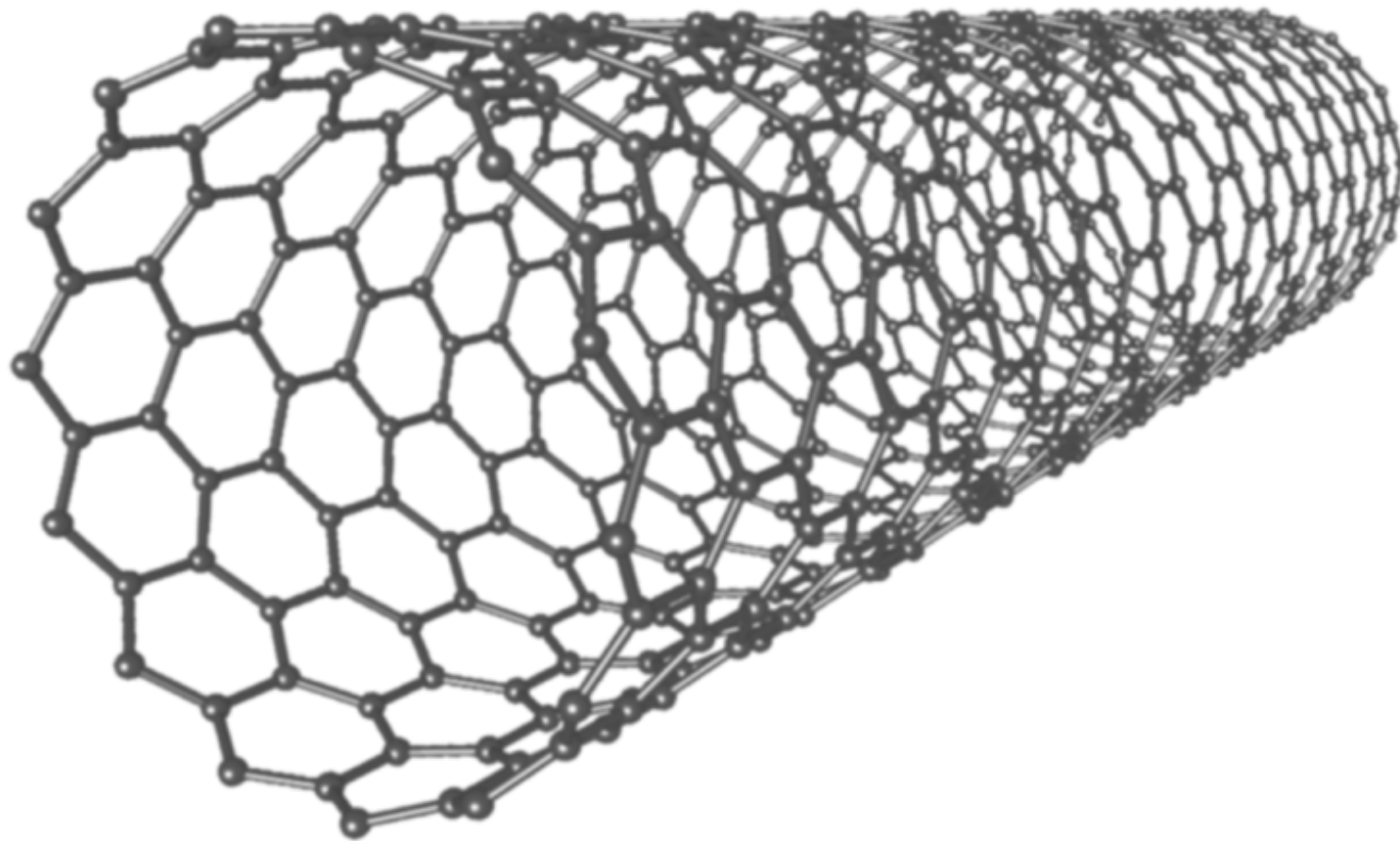
nanotube



graphene

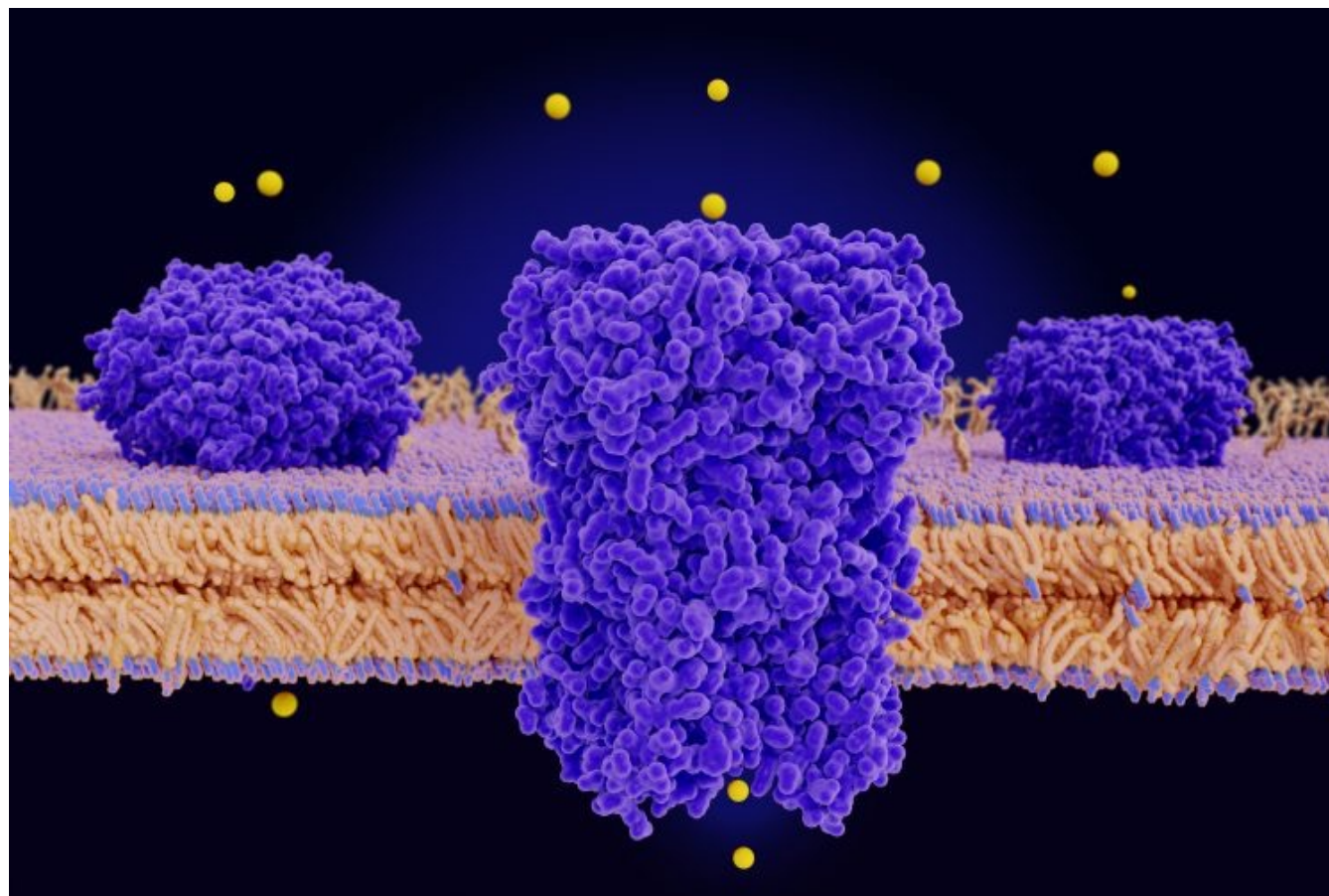


Disadvantages of carbon nanotubing



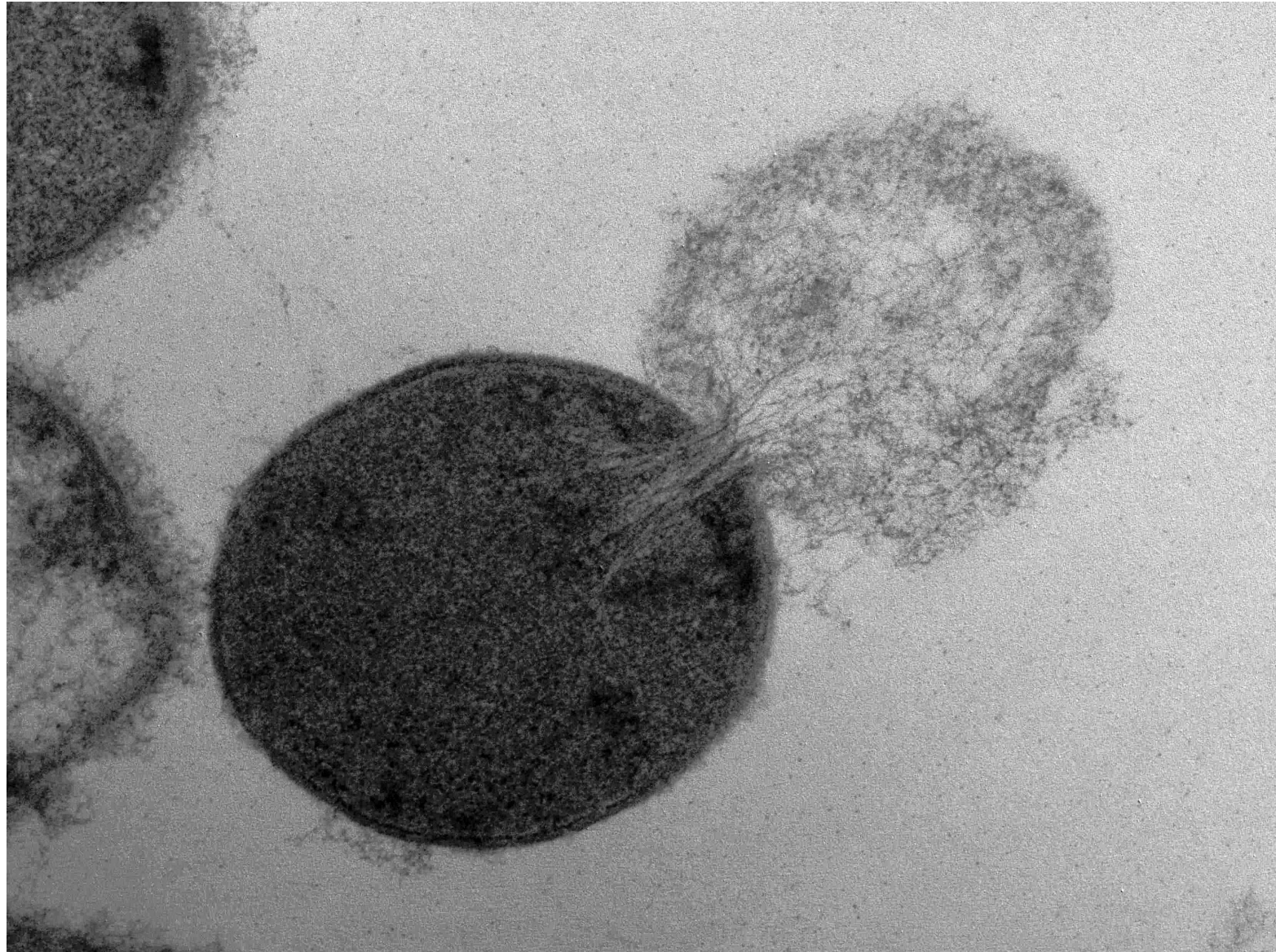


Advantages of molecular tubing



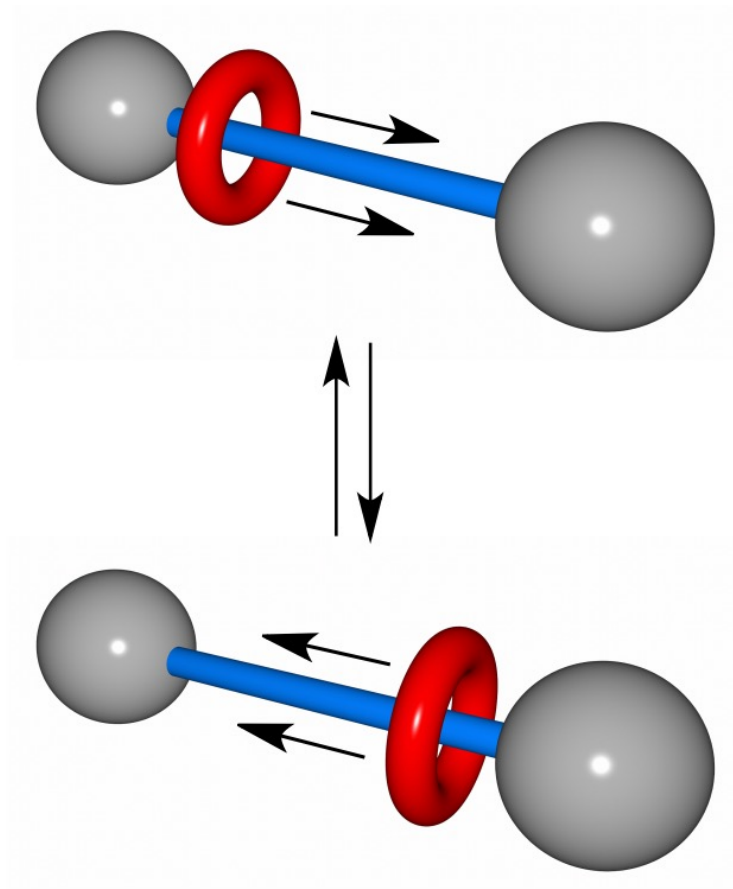
Balfour H. The ion channel ball-and-chain mechanism has finally been imaged. *Drug Target Review*.



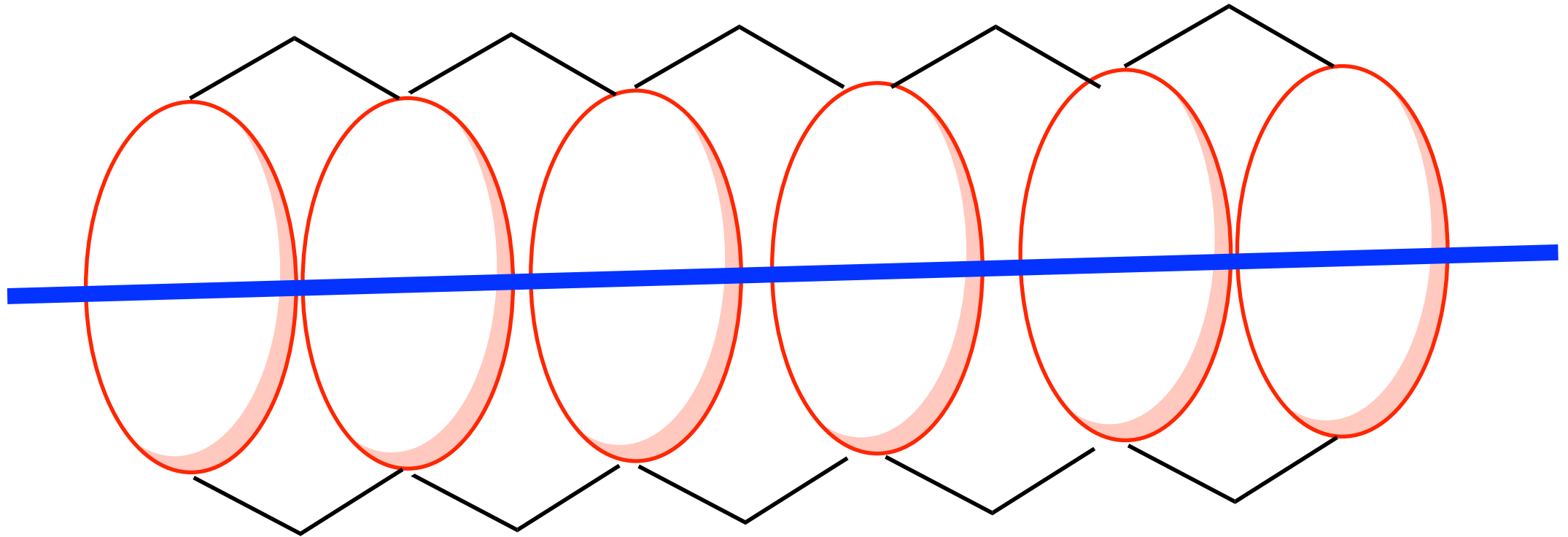




Rotaxanes

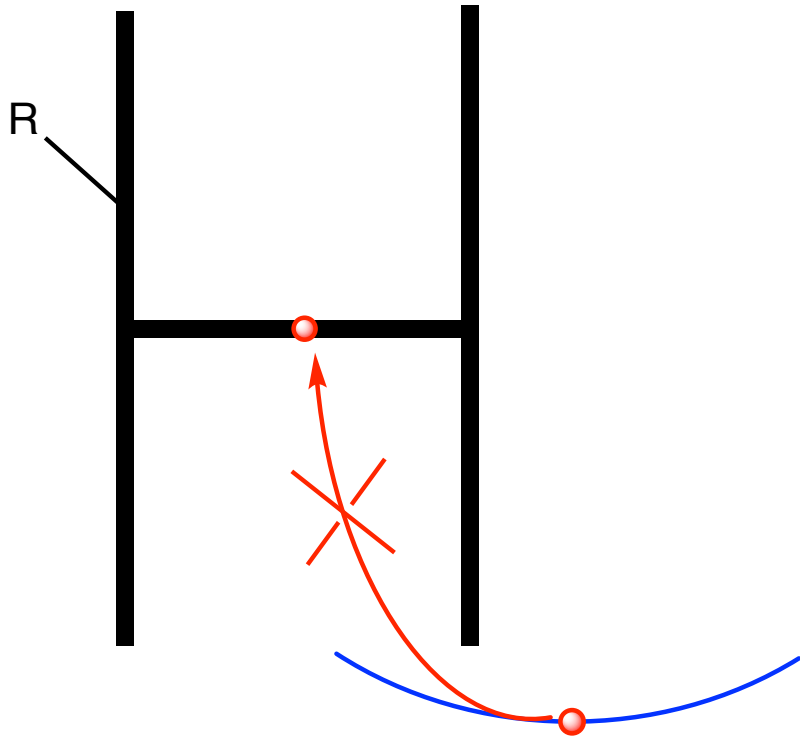


Cross linking of the rings

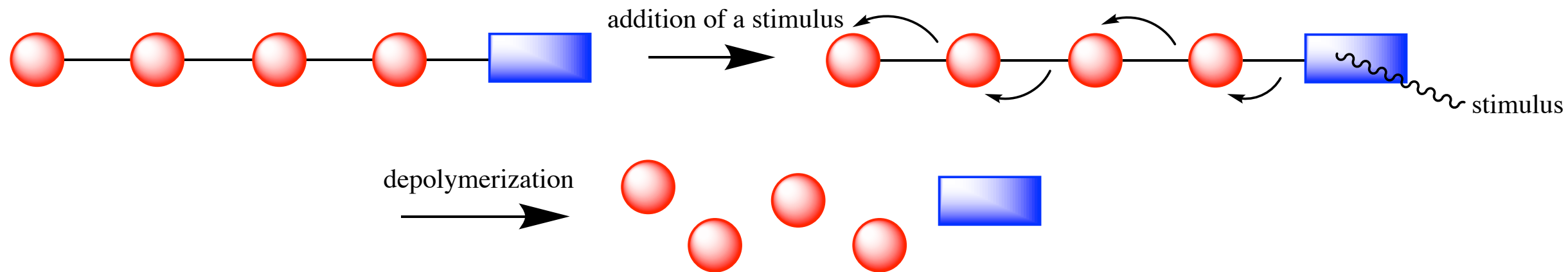


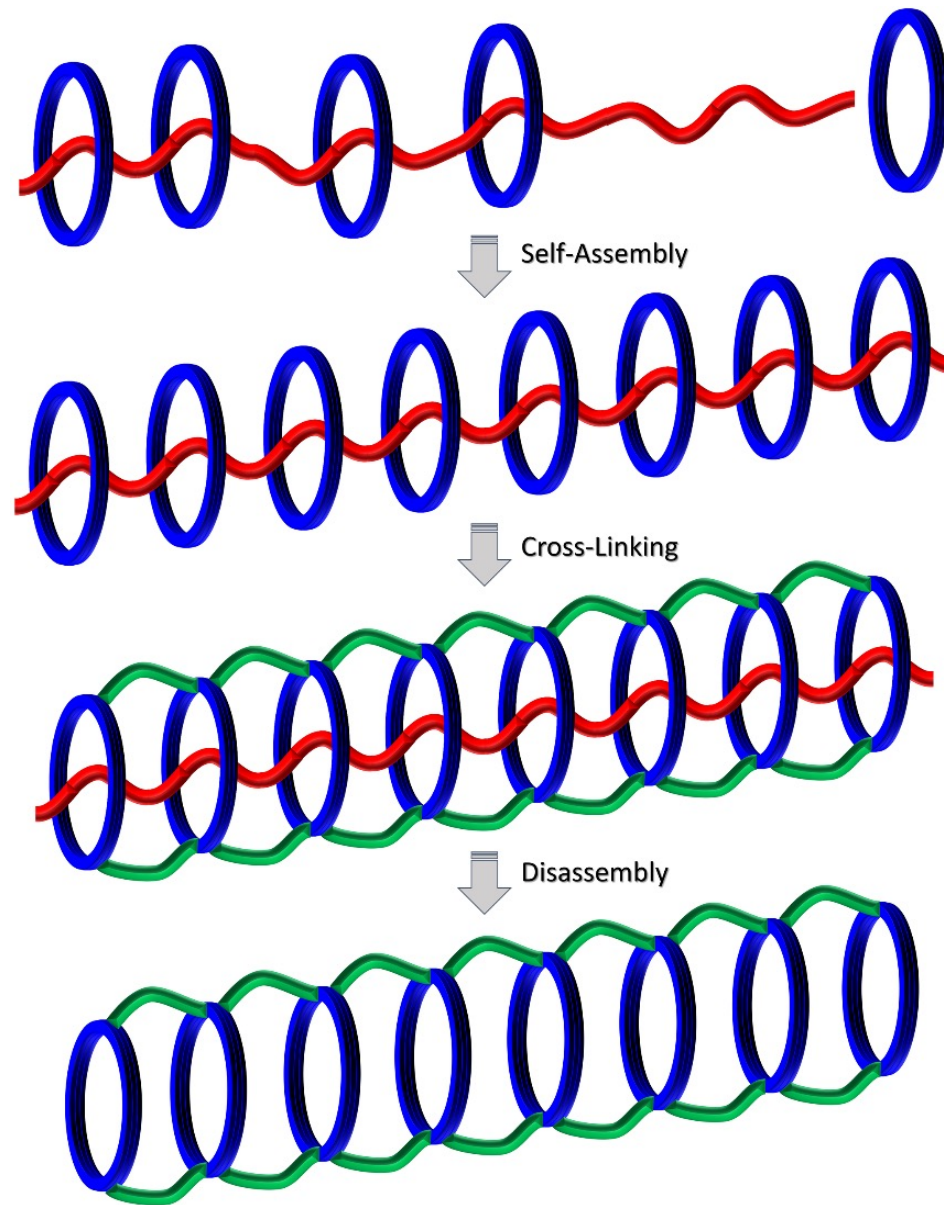


Too weak

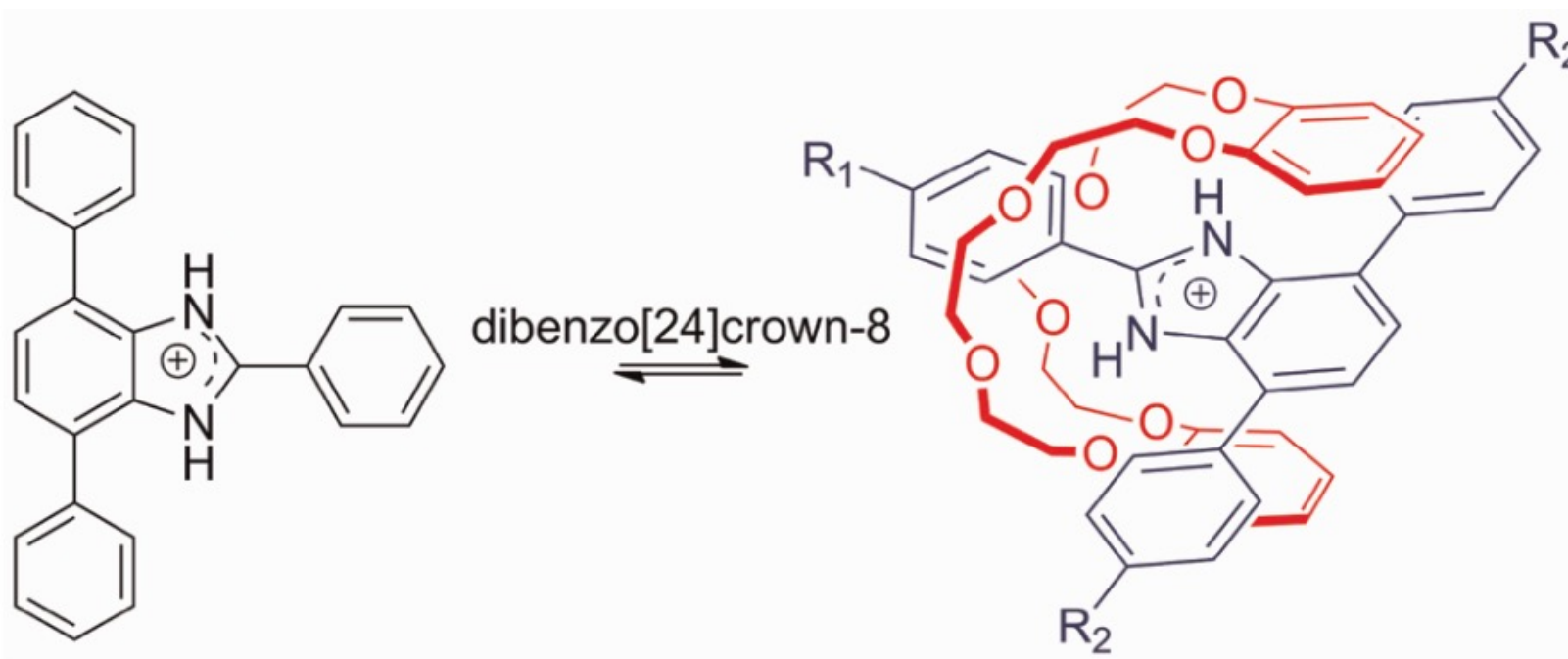


Self-immolative polymers



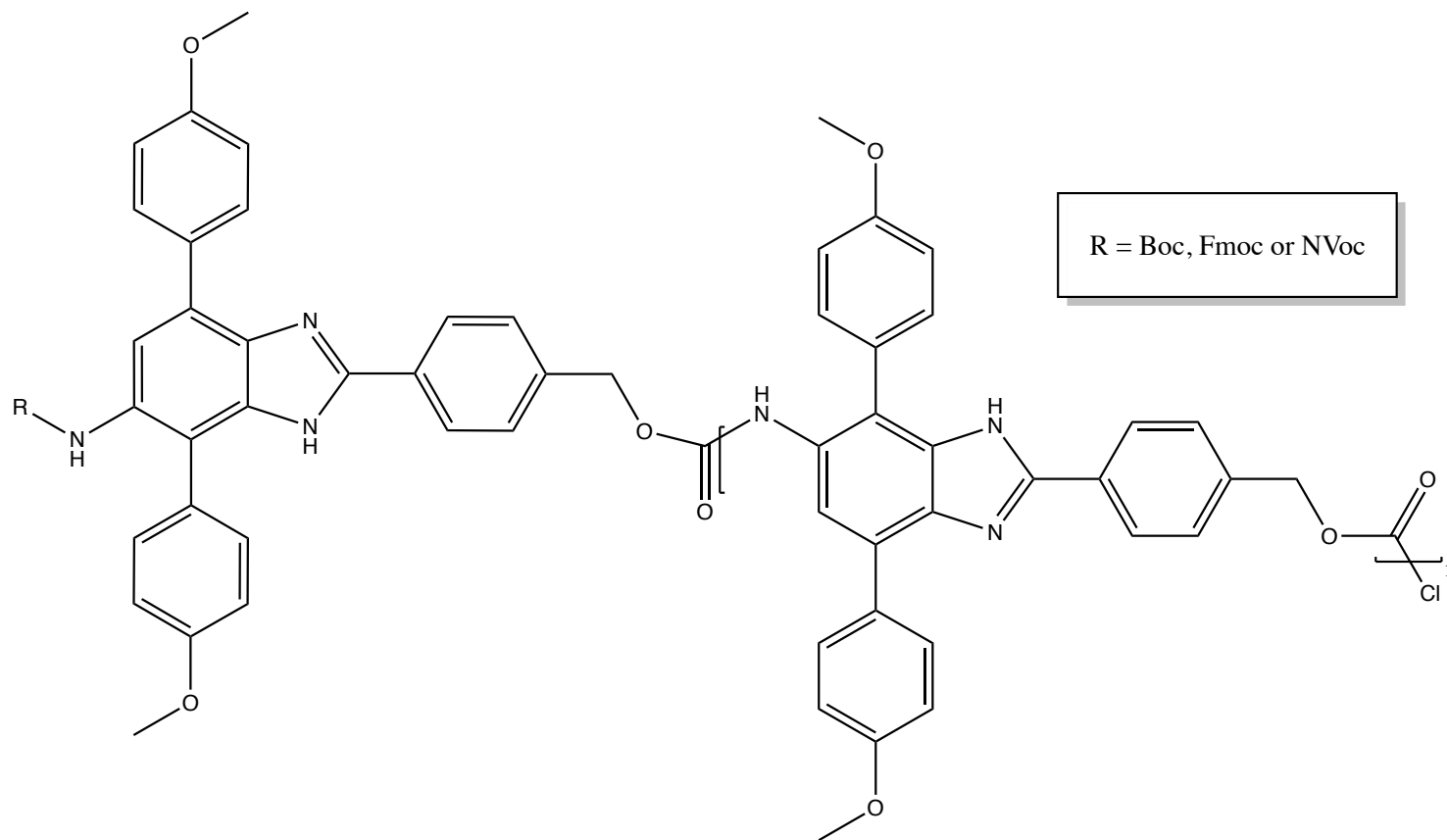


Model for our polyrotaxane



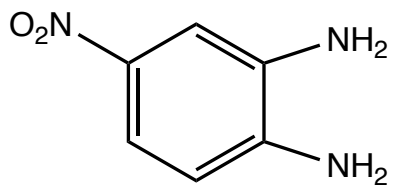


Benzimidazole scaffold synthesis and polymerization



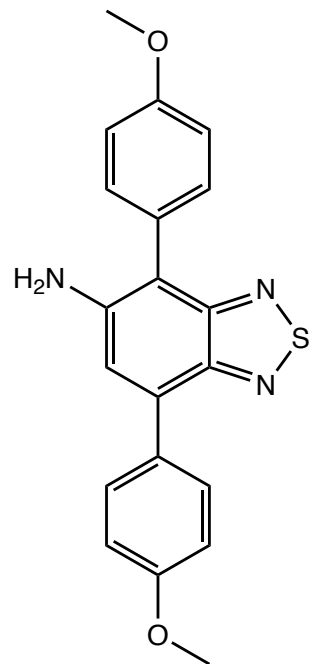


Experimental Data

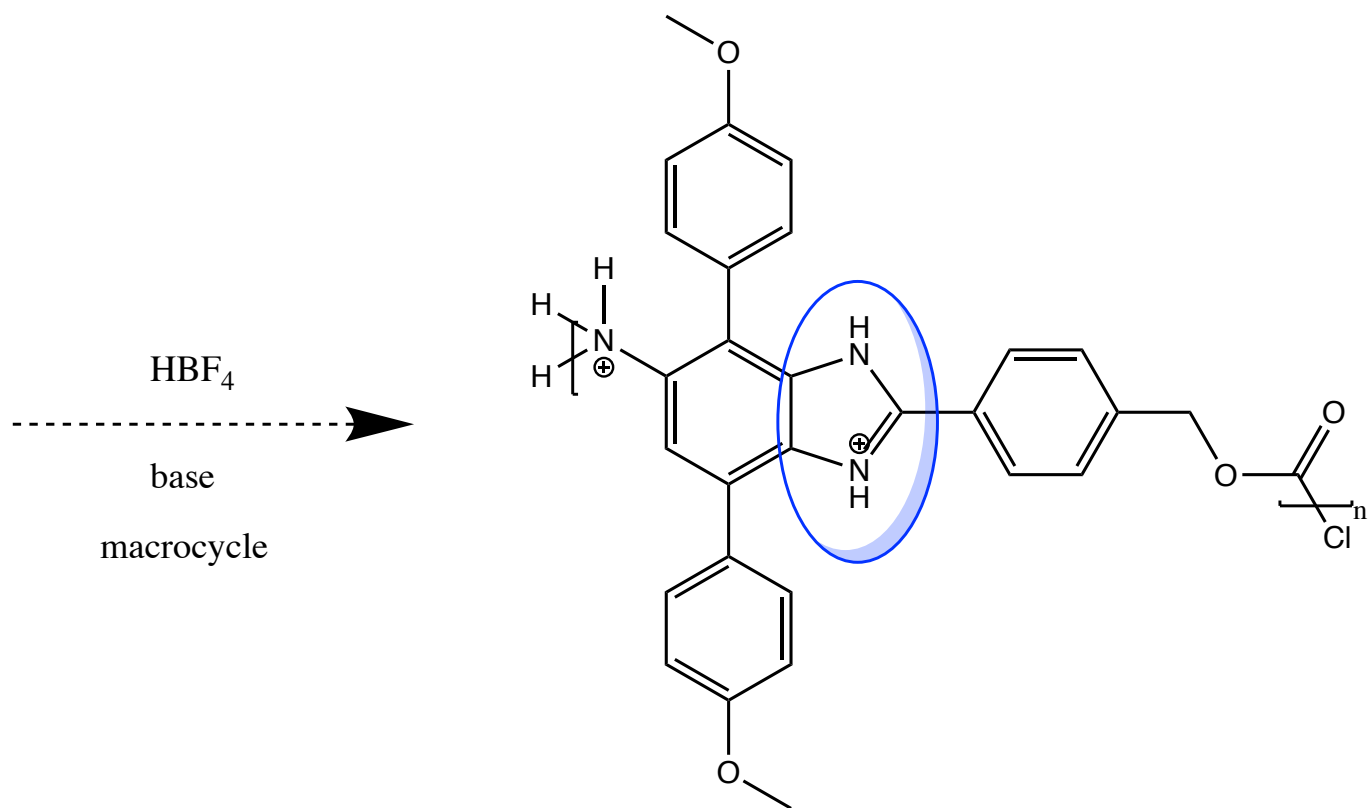




Future work



Degradation of the polymer



Acknowledgments

