Teaching Seminar: Design of Degradable Polymeric Biomaterials

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This lecture is aimed at introducing the mechanisms by which polymeric biomaterials degrade in the body. The routes of polymer degradation, the difference between bulk and surface erosion, and the factors that affect polymer bioerosion will be discussed. Finally the most commonly used degradable polymers and examples of their biomedical applications will be introduced. The students will learn the needs and advantages of degradable biomaterials and the considerations in the design of such materials.