Chapter 5. Bioinspired and Biomimetic Microflyers

Engineered Biomimicry

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This chapter describes recent advancements in the area of manmade microflyers. Finally, a few of the sensing mechanisms utilized by organic flyers are discussed. Areas of aerodynamics at the level of microflyers are talked about. Modeling of the aeromechanics of flapping wing microflyers is definitely explained with an illustrative example. As the concentrate is on bioinspiration and biomimetics, scaled-down versions of typical aircraft, such as for example fixed-wing micro air automobiles and micro-helicopters, are not addressed. Microflyer concepts developed by several researchers are described at length. The look space for microflyers is certainly described, along with fundamental physical limits to miniaturizing mechanisms, energy storage, and electronics.