## **INTRODUCTION**

There is no doubt that biomaterials in orthopaedics have revolutionized the orthopaedic world. Not only has it brought relief to countless thousands of patients suffering from fractures or diseases in orthopaedic but its ramifications in keeping healthy sound movable patient is available now. Thus avoiding the sequelae of long period of immobilization.

As, the technological advances in orthopaedic surgery Continues at an unpredictable rate, many new designs and biomaterials represent not only practical improvements but also possible new problems. Current issues related to such topics develop, as which biomaterial should be used in a particular situation, the systemic and remote site-effects of the various biomaterials that are used, and the local response (such as osteolysis). (Friedman ET al, 1993)

So, we will discuss the different types of materials used in implant construction playing an important role in implant fixation and making brief study of its properties and how the choice of materials can affect the implant structural rigidity and the host response to these different material (Crowninshield, 1988), as each material has a particular combination of properties, determined by its composition and processing, and each set of properties produces both benefits and limitations within the bounds of any device design. (Friedman ET al, 1993)