

CHAPTER 7

FUTURE SCOPE

Tribological behaviour of Ti-TiB based composite containing different amounts of TiB has been investigated in the present study at different loads, and frequency under non-conformal (ball-on-disc) contact conditions. However, there are a variety of applications where components have to work under conformal contacts. Hence, future studies may be conducted to explore the frictional performance under conforming conditions. Some of the below-mentioned studies may also be undertaken in future.

1. The composites may be heat treated at different test temperatures and the effect of the heat treatment on mechanical and tribological performance may be analyzed under elevated temperatures and different counterface materials.
2. Ti-TiB composites containing either a single solid lubricant or a combination of two or more solid lubricants may be synthesized and their tribological behavior may be evaluated under different conditions of load and speed to explore the possibility of the synergetic between the solid lubricants in reducing the friction and wear.
3. Titanium based composites containing nanosized TiB whiskers may be synthesized *in-situ* and tribological properties may be examined under corrosive environments to check their biocompatibility.

