Chapter 5
Conclusions

Amongst three welding process undertaken Friction Stir welding produced better mechanical properties when compared to LB and TIG welding process for AA5083-H321 Aluminium alloy due to

- Retention of Alloying elements
- Recrystallized grains
- Fragmentation and nucleation of Intermetallic compounds
- Absence of solidification defects

FS welding on Cast Al-Mg-Sc alloy plate has proved to be a better process than FS welding of AA5083 alloy.
Future Work

In the present study, aluminium alloy 5083 in H321 condition was But welded using various welding techniques such as Tungsten Inert Gas, Laser Beam and Friction Stir welding.

Further, investigation of the corrosion resistance in marine environment of the Butt welded joints will help one to understand and estimate the life span of this material in the marine environment.