CHAPTER 6

FUTURE WORKS

The future works are recommended as follows;

- Since it was possible to produce glass-ceramic materials by using zinc waste as a raw material. The possibility of producing other materials by using zinc waste, such as glasses, glaze tile, glass frit, is recommended.
- 2. Three point bending strength of glass-ceramics contained pyroxene phase shows the best value in this study but there were large amount of close porosities in these glass-ceramics. The study of producing glass-ceramics with less porosity to improve the bending strength of these glass-ceramics is interesting.
- Although glass-ceramics contained pyroxene phase show high bending strength, the chemical durability was very poor. Therefore, the recommended future work is to study the means to improve the leachability of Pb from these glass-ceramics.
- 4. Glass-ceramics contained wollastonite-ferroan show good chemical durability, since the leached out concentration of Pb in these glass-ceramics was lower than the USA regulatory limit. It would be very interesting to study more specific in the mechanism of Pb encapsulation.