

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Chitin whisker-reinforced natural rubber bionanocomposite film containing coconut oil and pluronic were successfully prepared by solution casting method. The stability of emulsion increased with increasing the ratio of pluronic. Moreover, the incorporation chitin whisker into natural rubber matrix could improve the tensile strength which the strength of film can generate pressure to prevent the over production of collagen. The presence of coconut oil in the nanocomposite films resulted in the improved flexibility, indicating the plastisizing effect of coconut oil in natural rubber matrix. It revealed that this film is easier to use on joints. The coconut oil can release from the nanocomposite films that it will aid in healing and repairing the wound. From the table of composition, the suitable composition for use in scar prevention is B3 or C3. In conclusion, all result of this work exhibited that this bionanocomposite film can be a functionalized dressing for scar reduction.