

UNIVERSITI TEKNOLOGI MARA

**AN ALTERNATIVE MATERIAL
FOR CRAFT:
AN EXPERIMENTAL RESEARCH OF
PATINATION TECHNIQUE ON ZINC**

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ABSTRACTS

An Alternative Material for Craft: An Experimental Research of Patination Technique on Zinc

The craft and zinc industry has been considerable as one of the economic resource to Malaysia. Since it is cheap and enables to apply in various surface finishes, zinc has a potential in producing craft item. Furthermore, it also can be decorated using patination technique, which will produced colours on the surface of metal. In Malaysia, many individuals are not recognized this patination technique. Therefore, the main practical objective of this research is to test the feasibility by introducing the alternative material and the appropriateness of the integration of zinc and patination technique in craft items.

This research was conducted by experimental project on zinc and the surface treatment. Surface treatment can be divided into two techniques, which is surface finishes and surface colours technique. There are four types of surface finishes that applied on zinc and seven techniques or recipes of patination for surface colours. Experiments on patination technique were carried out with the application of chemical onto zinc surface. The results from the experiments were used to create a craft product and as a reference materials on the application of the integrated process. A questionnaire is also been used in gathering a data on consumer knowledge and view on zinc as an alternative material and patination technique as well as their preference on craft products, patterns, surface finishes and surface colours. An interviews and observation are also utilized to establish the local craft development in terms of craft producers and items in Malaysia's market.

Zinc is able to be an alternative material in producing craft items such as jewellery, household and souvenir in Malaysia. The uses of zinc in making craft items and the application of patination are simple and suitable to be practiced in craft industry either for small or medium scale.

The project's findings from the research process proved that zinc can be integrated with patination technique as a decorative process in craft items. Moreover, these findings are not to compete with the current material or metal used in producing craft, but to pave the way for a new alternative material in Malaysian craft item and indirectly to up grade the economy and social challenges in the future.