Faculty of Pharmacy

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Name: Tommy Julianto Bustami Effendi
Title: Nanoemulsion Loaded With Palm Vitamin E For Cosmeceutical Applications
Supervisor:
- Prof. Dato’ Dr. Abu Bakar Abdul Majeed (MS)
- Prof. Dr. Yuen Kah Hay (CS)

Nanoemulsion is one of the alternative nano-lipid delivery systems of lipophilic active ingredients into the human skin in pharmaceutical and cosmetic applications. Palm vitamin E extract is a natural lipophilic active that contains α-, β-, δ-, γ-tocotrienols and α-tocopherol. Palm vitamin E has the potency as an antioxidant for delaying the skin ageing process in cosmetic application, although the skin absorption of palm vitamin E in conventional formulations is considered low. The high lipophilicity of palm vitamin E isomers causes the limitation in the skin penetration. The skin penetration can be enhanced by the loading of palm vitamin E extract in an oil phase of a nanolipid-delivery system such as nanoemulsion. Therefore, the potency of nanoemulsion loaded with palm vitamin E extract was studied. Palm vitamin E extract was loaded in two nanoemulsions prepared by two different techniques and then incorporated into polymeric hydrogels. The skin absorption and pharmacokinetics of vitamin E isomers loaded in nanoemulsion hydrogels were investigated. Liquid chromatography assay method of α-, δ-, γ-tocotrienols and α-tocopherol in various samples of the different stages of this study was successfully validated and re-validated. Nanoemulsion formulations were developed firstly by the

Faculty of Art & Design

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Name: Asliza Aris
Title: The Evolution & Transformation Of Baju Kurung In The Peninsular Of Malaysia
Supervisor:
- Associate Prof. Dr. Norwani Md Nawawi (MS)

Baju Kurung has existed over more than 600 years ago. It has been the pride and heritage of the Malay society since the Great Malaccan Sultanate in the 15th Century. Since then, Baju Kurung has gone through some changes, which include its length, cut and shape, fabrics, style and coordination. Baju Kurung name is well-known to Malaysian society especially to the Malay people. It is common that any garment that resembles the form of Baju Kurung is often called Baju Kurung (Moden). Due to this assumption, this research tends to construct an understanding that draws the line between traditional Baju Kurung and Baju Kurung Moden. Hence, the character definition of Baju Kurung is clearly drawn. The research looks at historical study of the Baju Kurung through references of historical literature, journals and visual evidence (photographic documentations) obtained from the libraries, museums,

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Name: Saemah Yusoff
Title: Tekat As A Malaysian Heritage : A Study Of Motif, Form And Meaning
Supervisor:
- Prof. Dr. Muliyadi Mahamood (MS)

Tekat is a form of embroidery on cloth, usually velvet, using gold threads whereby shapes and patterns are formed by stitching the gold threads over a core of medium-thickness pre-cut papers (mempulur). It is one of the traditional handicrafts that have been handed down the generations. Today, this Malay art of embroidery still lives on but only in a few locations. Almost all practitioners of tekat tuji are to be found in the royal town of Kuala Kangsar, Perak. Even so, their days are numbered as many are old and often have no heirs to their knowledge. Hence, the art of tekat is facing severe decline if not total extinction. Several reasons are attributed to this phenomenon. Firstly, the lack of practitioners of tekat. The second reason is that very few of the younger generation are involved in tekat art. Thirdly, the products of tekat are not commercial enough. If nothing is done to arrest this decline, the art

Faculty of Film, Animation & Theatre

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Name: Maszalida Hamzah
Title: The Angin Of The Dalang In The Kelantan Shadow Play
Supervisor:
- Prof. Dr. Solehah Ishak (MS)

It is said that the journey of the Dalang of the Kelantan Shadow play is first and foremost determined by the existence of the Angin in him for without which, this vocation will not materialise. Once confirmed, he will undergo the basic, intermediate and advanced level of the ‘Way of the Dalang’. There are twelve types of Angin in the human that is divided into three. First is the Angin found in all Malay traditional arts inclusive of Wayang Kultil and Mak Yong. It is also present in the traditional Kelantan arts through lineage that includes Dalang Wayang Kultil (Malay Shadow play Dalang), Bomoh (healer) or Dukun, Bidan (midwife), Tukang Urut (massuser). The third is the Angin called Saka and this seem to point to the darker side of the Angin. This thesis is concerned only with the first and the second type of Angin while acknowledging the existence of the third. Angin is also said to be a concept of energy or soul or semangat, or nafsu that could also lead to pity or belas and intense pleasure or as an artistic temperament. Some Dalangs also added the word kehendak (will) as
formation of lyotropic phase system as a pro-nanoemulsion (nanophase gel) by heat mixing, and secondly by using self nano-emulsifying technique by cold mixing. Two oils were used in the nanoemulsion formulation development; palm oil was formulated as a nanoemulsion by using hot mixing technique and, *Nigella sativa* oil nanoemulsion was prepared by using cold mixing of self emulsifying system. Palm oil nanoemulsion was formulated with the aid of design experiment as semisolid hydrogel by loading carbomers (Carbopol 934 and 940) and then characterized by the droplet size distribution to determine the best formulation for loading with palm vitamin E extract. The effect of carbomers incorporated in nanoemulsion formulations on the droplet size distribution, semisolid rheology and texture was determined by using expert design experiment to select a stable formulation for permeation studies. The in vitro vitamin E isomers permeation through the polycarbonate membrane was investigated using Franz diffusion cells. The vitamin E isomers permeation through polycarbonate membrane depended on the pore size of membrane and the concentration of Carbopol 940 in nanoemulsion hydrogel formulations. The different formulation of nanoemulsion formulation has not shown any affect on the permeation profiles of vitamin E isomers. Finally, the in vivo skin penetration of α-, δ-, γ-tocotrienols and α-tocopherol loaded in nanoemulsion hydrogel by topical application on the hairless rat abdominal skin was investigated. The accumulative amount of vitamin E isomers in rat skin epidermis and the bioavailability of vitamin E isomers measured in the rat plasma showed that nanoemulsion hydrogels with small droplets size provided high skin absorption. δ-tocotrienol in the form of nanoemulsion hydrogel with mean droplet size of 100nm was preferably absorbed through the rat skin compared to γ-, α-tocotrienols and α-tocopherol.

National Archive Malaysia and personal collections. A study of samples of man's and woman's Baju Kurung conducted a systematic analysis to document the Baju Kurung's workmanship, measurement and fabric choice during a certain period of time. From historical study, literature review of current trend and the study of the Baju Kurung samples the research successfully trace the chronology of the development of Baju Kurung in the Peninsular of Malaysia. Unstructured interviews were conducted with people who were involved with Baju Kurung industries, academia, traditionalists and maker. The issues that incorporate Baju Kurung traditional identity is solved by categorization of the garments into several different groups according to their style and character. The identity of traditional Baju Kurung is strengthened by imparting the method of evaluation of Malay aesthetic principles to the garment. This will be an added value to the existing character definition of Baju Kurung. Character definition of the traditional Baju Kurung will protect the Baju Kurung from being misused by fashion industries. Based on the development of the Baju Kurung it is believed that Baju Kurung will continue to inspire modern Malay garments in the future. It is hoped that this research will be a major reference in future study in related field.

will only be relegated to only a few treasured pieces kept by the museums or collectors. As such, this study is intended to document the art of *tekat* as a means to continue and preserve this art before its demise. Three hypotheses are forwarded in this study. The first hypothesis is that describing and documenting all aspects of the art of *tekat* can help to preserve and perpetuate it for the future generation. The second hypothesis claims that new *tekat* products can be created so as to make them more commercial and practical for daily uses. The third hypothesis is that the art of *tekat* can attract fresh interest among the younger generation especially, if it is often introduced and widely promoted to the public. The methodology used is a qualitative descriptive research using interviews as the instrument. Eleven respondents comprising of *tekat* makers, academicians, authors and government officials were selected. The data collected was analysed using “Content Analysis”. In addition, a Formalistic Study was also conducted on selected samples of motifs. The overall findings showed that *tekat* is indeed in dire straits and facing extinction in the near future. Nevertheless, the researcher felt there is still hope for it and had made several recommendations to preserve and perpetuate this art form.

the *Angin* while agreeing to the word *semangat* (will), *nafsu* (ego/consciousness) and *belas* (Mercy) and *nafas* (breath). However, in all of the definitions above, none has explained in detail what the *Angin* is and how it is derived. The *Angin* of the Dalang in this research has been determined to reside in the internal knowledge of the Dalang. Its presence is in the advanced training known as Sumpah Aturan Rahsia (The Oath of Secrecy). It consists of the process of Penyatuan dan Penyebatian (Union and Subsistence), Pertapaan/ Meditasi (Meditation) and Mantera (Invocation). Through purposive sampling, the words uttered by the Dalang in the in-depth interviews conducted and what is revealed about their training, before or pre-performance knowledge, the stories during the performances and the characters involved becomes the clues and signposts in developing the idea of the *Angin* within the Dalang. By applying the qualitative method which includes in-depth interview through the approach of Islamic Mysticism and Philosophy, the researcher is able to interprete the meaning (*Ta’wil*) of the *Angin* of the Dalang and its instrumentation internally and externally. It is found that the *Angin* of the Dalang is the spiritual principle guiding him in the process of menanggung pesaka (safeguarding tradition). This is seen as the survival kit that will determine the survival of the Dalang of the Kelantan Shadow play with Islam as its pillar.