## NANOTECHNOLOGY IN COSMETICS: THE LEGAL CHALLENGES IN MALAYSIA

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The students/authors confirm that the work submitted is their own and that appropriate credit has been given where references has been made to the work of others.

#### ABSTRACT

This project paper on nanotechnology in cosmetic is written to observe the legal challenges arising from the development of the technology. The issue of nanotechnology arises due to the reason that despite the vast development of nanotechnology there is yet a complete research done on nanotechnology, on whether the technology is safe. Scientist worldwide has often expressed their concerns that nano-particles in cosmetic would have its own potential harm towards users. One of the major developments of nanotechnology is in the cosmetic industries where smaller particles work better. Our market search confirms that nano-cosmetic products are available on the market shelf despite the lacking in the legislation and research done. Our major research strategy is by a quantitative analysis and references are mainly obtained from the internet and scientific journals. Data have been collected from surveys conducted and published reports on nanotechnology in cosmetic and people's awareness on this matter. Response from the survey shows that 82% of respondents are unaware of any potential harm of nanocosmetic and the lack of law thereof. These situations confirm the low level of awareness among Malaysian on this issue and therefore boost the necessity for us to target on the legal challenges of nano-cosmetic.

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#### **CHAPTER ONE: INTRODUCTION**

#### **1.0 INTRODUCTION**

Under this chapter, we basically highlight all the necessary preliminary information regarding our project paper to give information's before hand on what the research is all about. The preliminary information consists of the problem statement, conceptual features, literature review, objectives, methodology, limitation, significant of study and finally, the delimitation.

#### **1.1 PROBLEM STATEMENT**

Nanotechnology is now known as the 'hottest technology' that recently available in cosmetic field, being used by most of the beauty-concerned consumers. However, in Malaysia, this area under discussion has not been well thought-out at all compared to United States (US) and the European; they are more alert and concerned on the usage of nanotechnology in cosmetics issues. According to UNESCO, some nanoparticles could be hazardous if absorbed, ingested, or inhaled, although exactly how they would affect the body is not yet known.<sup>1</sup>A recent study published in the scientific journal Nature Nanotechnology finds that carbon nanotubes, used in the automobile industry or armor production, have similar toxic effect as asbestos and could even cause lung cancer.<sup>2</sup> With such threats, the establishment of international standards and regulations for the production, identification, transportation, distribution, and consumption of nanotechnology than of other developments like nuclear power and genetically modified foods because they know little about it.<sup>4</sup> They have no clue or idea upon the harm and the potential risk of the nano-cosmetics usage.<sup>5</sup> Thus, this leads to a situation where the consumers' legal rights

<sup>&</sup>lt;sup>1</sup> "Nanotechnology : Hidden Hazard" in

http://knowledge.allianz.com/en/globalissues/safety\_security/nanotechnology/nanotechnology\_hazards.html accessed on 27 July 2008

<sup>&</sup>lt;sup>2</sup> Ibid

<sup>&</sup>lt;sup>3</sup> Ibid

<sup>&</sup>lt;sup>4</sup> Guy Montague-Jones, in <u>http://www.cosmeticsdesign-europe.com/news/ng.asp?n=81635-nanotechnology-personal-care</u> accessed on 27 July 2008

<sup>&</sup>lt;sup>5</sup> Guy Montague-Jones, "High Double-Digit Growth Expected in Nanotech Cosmetics Market", in <u>http://cosmeticsdesign.com/news/ng.asp?n=81792-bcc-research-nanotechnology</u> accessed on 12 March 2008