

## **ABSTRACT**

Skin care is an important aspect of human health and beauty care. Moisture, softness, and oil levels in the skin are very relevant factors in determining the health and appearance of the skin. However, up to date, precise and non-invasive measurement of these skin parameters remains, a significant challenge. The main problem with this research is that there is no adequate solution to effectively and accurately measure skin moisture, softness and oil content simultaneously.

To overcome this problem, this study proposes the use of innovative technology based on CMOS cameras. This tool is able to measure skin moisture, softness, and oil levels using a contactless method. By utilizing sophisticated image processing and data analysis techniques, this tool is able to provide very accurate and fast results in skin measurements. In addition, this tool can be used in various fields, such as the skin care industry, dermatology research, and skin care product development.

It is hoped that the research results will show that a tool for measuring skin moisture, softness and oil content using a CMOS camera can provide accurate quantitative data. And it is hoped that it will help skin care professionals in designing more effective solutions. With this tool, the author has a potential solution to overcome existing skin measurement problems, increase the author's understanding of skin care, and help individuals take better care of their skin, making healthy, glowing skin as the desired end result.

Keywords: skin, oil level, moisture, softness, camera.