

**“Circle of Life ; Flow of thoughts” :**  
**Innovative Synthesized Soil to Textile Substitute**  
**to Create Garments for the Future**

**Abstract**

Global situations which change rapidly and connect to each other such as natural disasters, air pollution and the rise of global pandemic has affected humankind’s way of life dramatically. All crises make the humans realize environmental problems and change their living attitude. Things which must be urgently solved is restoring and conserving the natural resources and environment which is the duty of all humans to build up cooperation without borders and regardless of race. Also the Kingdom of Thailand, the country has set a plan and direction preparing to lay the foundation and manage risks appropriately in order to lead the country to balance as well as a direction enhancing the quality of the population to be secured, prosperous and sustainable. It can be seen from vision and goals of the nation's future which can be pushed to achievement by driving various national strategies, harmonizing essence and action plans which can be followed up concretely as well as the assessment of the development both internal and external. These are considered the strength and weakness of a country indicators.

For this reason, the researcher adopted the 12th National Economic and Social Development Plan to be the principle of a project entitled “Innovative Synthesized Melanin from Soil as Textile Substitute to Create Garments for the Future” by setting up research approach and expanding into following 3 approaches; approach to create innovations from scientific and aesthetic knowledge, approach to add quality and value of natural resources base as well as approach to support the creative economy growth. These 3 approaches correspond to following country development strategies ordered by their importance; the Strategy 8: Strategy for the Development of Science, Technology, Research, and Innovation, the Strategy 4: Strategy for Environmentally-Friendly Development and Growth. The research therefore realizes the importance of the Strategy 8: Strategy for the Development of Science, Technology, Research, and Innovation because the aforementioned knowledge will successfully promote environmental development.

The case study: The use of soil innovation to synthesize textile substitute and create garments for the future expanded from the study of the integrity cycle and change in “soil” properties as abundant mineral through an experiment process to synthesize bio-fiber and melanin from

good bacteria becoming textile substitute or valuable bio-cellulose which is a clean production technology and does not cause residual toxic substances or environment pollution. The result is a substitute material which is friendly to human body, degradable and returns the nature as the researcher desires to design and create pilot products and designing cycle for circular fashion, also believes that good products designing is not only for responding to basic human needs or facilitating human living but the products must also be considered, analyzed and designed.

## **7. References**

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