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TITLE OF PROJECT**: Investigation on application of composite geotextile in landslide prevention.**

NAME OF ALL AUTHORS: *Mrs. Sonia J. Pandey*
Pillai Hoc college of engineering and technology, Rasayani.

NAME OF YOUR MENTOR: *Dr. Shilpa P. Kewate*
Pillai Hoc college of engineering and technology, Rasayani.

NAME OF YOUR COLLEGE: Pillai Hoc college of engineering and technology, Rasayani.

ABSTRACT (150-300 words):

The research focuses on the application of composite non-woven geotextiles in landslide prevention. The problem statement addresses the current limitations and challenges in conventional landslide mitigation methods, highlighting the need for more effective and sustainable solutions. The methodology involves a various comprehensive analysis, including laboratory experiments and field studies to assess the performance of composite geotextiles in stabilizing slopes prone to landslides. The methods used for manufacturing of composite geotextile would be mechanical bonding. The results would be reveal promising findings, indicating that the application of composite geotextiles significantly enhances slope stability by reinforcing soil structures, improving drainage and erosion control of soil, thereby reducing the risk of landslides. The research also demonstrates the economic feasibility and environmental advantages of employing composite geotextiles compared to traditional methods. The main conclusion would be the study underscores the effectiveness of composite geotextiles as a viable and efficient solution for landslide prevention. The research would give the recommendation for long-term durability, diverse geological conditions, and the development of standardized guidelines for implementing composite geotextiles in landslide-prone areas, emphasizing the need for widespread adoption of this innovative approach in geotechnical engineering practices.

KEYWORDS: landslide mitigation, composite geotextile, non-woven , sustainable , mechanical bonding.

CATEGORY: Geotechnical Engineering