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A Review on Use of Mica in Concrete to Resist Geopathic Stress

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Abstract: *Geopathic stress is a controversial concept suggesting that certain geological factors and electromagnetic radiation in the Earth's crust can adversely affect human health and structures. In the context of concrete construction, geopathic stress has raised concerns about its potential impact on structural integrity and durability. This review paper examines the use of mica in concrete as a potential remedy for mitigating geopathic stress. Mica, a naturally occurring mineral with unique properties such as electrical insulation, thermal stability, and chemical inertness, holds promise as an additive to enhance concrete's resistance to geopathic stress. Through a comprehensive literature review, this paper explores the current state of research on partially replaced mica in cement concrete, including experimental studies, theoretical considerations, and practical applications. Key findings, benefits, and challenges associated with the use of mica in concrete are analyzed, and future research directions are proposed. By synthesizing existing knowledge and identifying research gaps, this review aims to contribute to a better understanding of mica's potential role in mitigating geopathic stress in concrete construction*

Keywords: Geopathic stress

REFERENCES

[1]. Sorate, R., Dharmadhikari, N., Kharat, A.G.,Bhagwat S., (2013), "Effect of Geopathic Stress Zone on Soil Properties", Elixir Geoscience 54C (2013) 12365-12367

[2]. Buniyamin, S. N., &Hussin, M. W. (2018). Review on the Application of Mineral Admixtures in Self-Compacting Concrete with Mica Powder as the Replacement Material. Journal of Advanced Research in Fluid Mechanics and Thermal Sciences, 43(2), 222-231.

[3]. Michalak, M., &Heunemann, F. (2018). Scientific Studies on Geopathic Zones—A Literature Review. International Journal of Environmental Research and Public Health, 15(2), 351.

[4]. Ibrahim, M. A., & Prasad, V. S. S. (2019). A Review on the Application of Mica Powder in Concrete. International Journal of Engineering Research and General Science, 7(4), 35-40.